DOCUMENT RESUME

ED 038 097 HE 001 432

TITLE	Goals for Higher Education in New Jersey. New Jersey Master Plan for Higher Education, Number 1.
INSTITUTION	New Jersey State Dept. of Higher Education, Trenton.
PUB DATE	Jan 70
NOTE	121p.
EDRS PRICE	EDRS Price MF-$0.50 HC-$6.15
DESCRIPTORS	Degrees (Titles), *Educational Objectives, *Educational Planning, Enrollment, Governance, *Higher Education, *Master Plans, *Planning, State Aid
IDENTIFIERS	*New Jersey

ABSTRACT

This report is the first in a series by the New Jersey Board of Higher Education in an effort to develop a master plan for higher education in the state. It attempts to ascertain: (1) where the New Jersey higher education system stands at this point in time; and (2) which goals the system must strive to meet. The report contains four sections. Part I discusses the need for planning, the planning process, the situation in the state, and the prerequisites for building a strong higher education system. Part II outlines ten goals for higher education. Part III discusses the environment, including population patterns and trends, the economy, and state support for higher education. Part IV describes the system of higher education in New Jersey: i.e. structure, governance, degrees and professional programs offered, enrollment data, financial aid, library resources, computer resources, and institutional cooperation. Tables, graphs, and illustrations are interspersed throughout the document. Forty-one pages of data are appended. (AF)

ED038097

New Jersey Master Plan for Higher Education
Number 1

GOALS FOR HIGHER EDUCATION IN NEW JERSEY

NEW JERSEY
BOARD OF HIGHER EDUCATION

EDWARD E. BOOHER, *Chairman*
MRS. JOHN H. FORD, *Vice Chairman*
WILLIAM O. BAKER
MRS. MAXINE COLM
JOHN T. CONNOR
C. DOUGLAS DILLON
MORRIS FUCHS
DONALD C. LUCE
V.D. MATTIA
WILLIAM H. McLEAN
EDWARD J. MEADE, JR.
JOHN M. SEABROOK
GEORGE F. SMITH
DR. DEBORAH CANNON WOLFE
FREDERICK O. ZIEGLER
RALPH A. DUNGAN (Ex-Officio)
CARL L. MARBURGER (Ex-Officio)

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

HE001432

NEW JERSEY
DEPARTMENT OF HIGHER EDUCATION

RALPH A. DUNGAN, Chancellor

STEFFEN W. PLEHN, Assistant Chancellor,
Office of Planning and Development

TABLE OF CONTENTS

Page Number

I PLANNING FOR HIGHER EDUCATION IN NEW JERSEY 1

- The Need for Planning 1
- Planning to Date 2
- The Planning Process 3
- New Jersey's Master Plan for Higher Education 4
- New Jersey's Situation — A Perspective 5
- What Are These Prerequisites 7

II GOALS FOR HIGHER EDUCATION IN NEW JERSEY 9

1. To Assure each Individual the Opportunity to be Educated to the Height of his Potential 10
2. To Eliminate Financial Barriers 10
3. To Foster Diversity and Flexibility 11
4. To Foster an Integrated System of Public and Private Institutions 12
5. To Strive for Excellence 12
6. To Help Meet the Needs of Society 13
7. To Encourage Research and the Advancement of Knowledge 13
8. To Sustain Academic Freedom 14
9. To Contribute to the Well-being of the Community 15
10. To Use all Resources to Full Effect 15

III THE NEW JERSEY ENVIRONMENT 17

- Introduction 17
- Population Patterns and Trends 17
- New Jersey's Economy 20
- State Support for Higher Education 23

IV THE NEW JERSEY SYSTEM OF HIGHER EDUCATION ~~27~~ 26

- Introduction ~~27~~ 26
- A Structure and Governance ~~27~~ 26
  - Structure of the System ~~28~~ 27
- B Programs — 1968-1969 Degrees and Enrollments ~~37~~ 36
  - Summary ~~37~~ 36
  - 1. Associate Programs ~~38~~ 37
  - 2. Bachelor's Programs ~~40~~ 39
  - 3. Masters and Doctoral Programs ~~44~~ 43
  - 4. Professional Programs Summary ~~46~~ 45

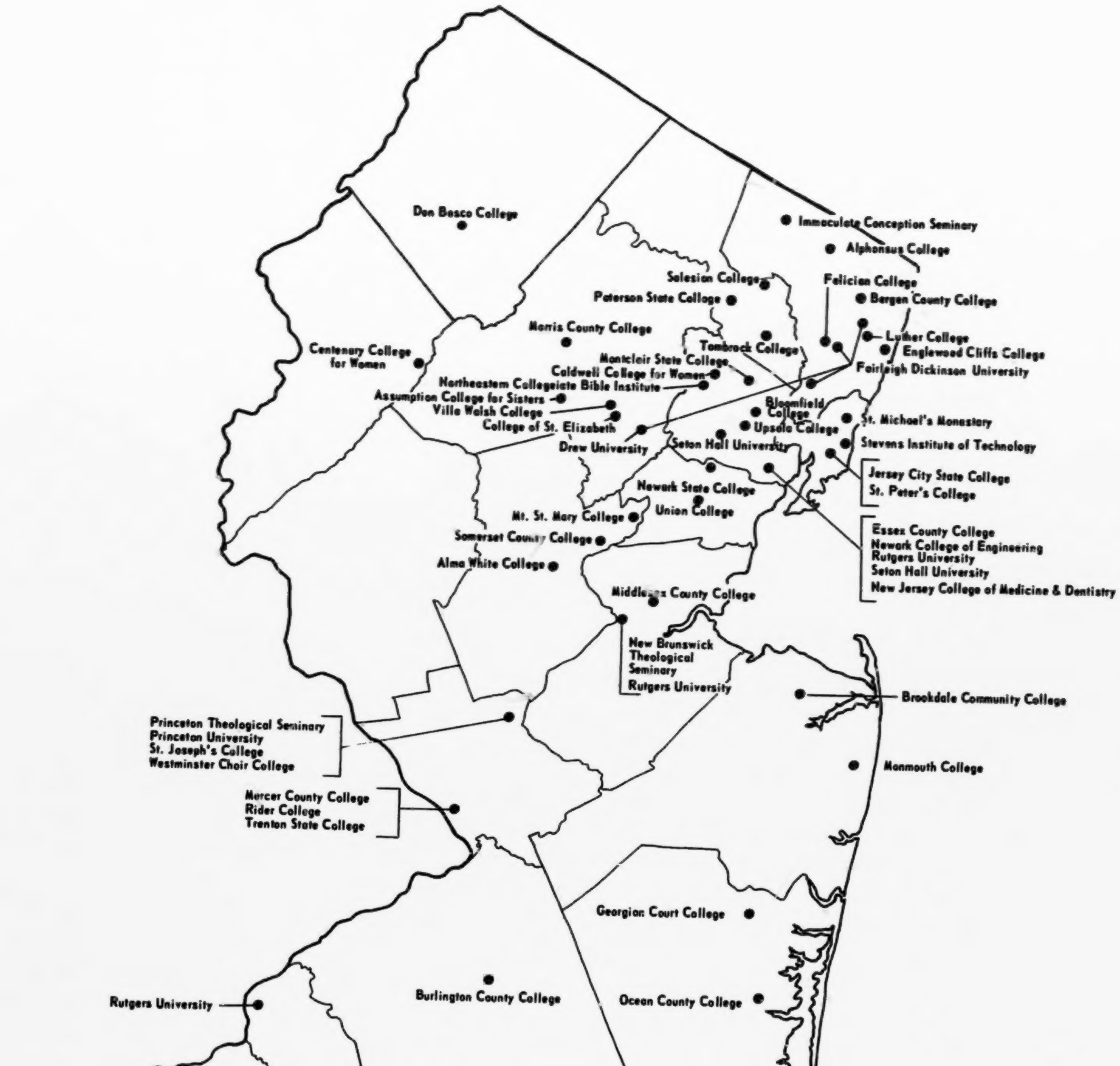
C Enrollments ~~59~~ 57
Introduction 58 57
1. High School Graduates ~~60~~ 58
2. In-State and Out-of-State Enrollments ~~61~~ 59
3. Enrollment Trends ~~61~~ 59
4. 1968 Opening Fall Enrollments ~~62~~ 60
5. Enrollment Projections 63 61
D Financial Aid ~~65~~ 62
E Library Resources ~~68~~ 65
F Computer Resources ~~73~~ 68
G Institutional Cooperation ~~77~~ 72

FIGURES

1. Population Density by County, 1968 17
2. Population Projections 18
3. Change in Population Under Age 18 19
4. New Jersey College Age Population 19
5. Value Added by New Jersey Industries 1958-1968 20
6. Non-Agricultural Employment, New Jersey, 1965-1970 21
7. Percent Distribution of Employed Workers, 1910-1960 22
8. What States Spend per Capita for Higher Education 23
9. Per Capita Expenditures of Selected Items 24
10. New Jersey System of Higher Education ~~28~~ 27
11. Institutions of Higher Education ~~36~~ 35
12. Degrees Granted by Program, 1969 ~~39~~ 38
13. Full-Time Enrollment by Program, 1968-1969 ~~41~~ 40
14. Part-Time Enrollment by Program, 1968-1969 ~~43~~ 42
15. Distribution of 1968 High School Graduates by Level and Sex ~~60~~ 58
16. Distribution of High School Graduates Who Went on to Institutions of Higher Education 60 58
17. Financing of the Minimum Cost of College ~~66~~ 63
18. Types of Financial Aid Available ~~67~~ 64

APPENDIXES

A. Degrees Awarded by Program and Level, 1969 ~~83~~ 76
B. Degrees Awarded by Program, Level, and Institution, 1969 ~~84~~ 77
C. Enrollment by Program and Level, 1968 88 81
D. Enrollment by Program, Level, and Institution, 1968 ~~91~~ 83
E. Distribution of 1968 High School Graduates by Type of Post-secondary Education Attended ~~100~~ 91
F. Distribution of 1969 High School Graduates going into Post-secondary Education by County ~~101~~ 92
G. Full-time and Part-time Enrollment by Level and Institution 1968 ~~102~~ 93
H. Full-time Undergraduate Enrollment by Institution and County ~~104~~ 94
I. Minority Group Enrollment by Institution ~~108~~ 97
J. Accreditation by Nationally Recognized Associations other than Regional Associations by Institution ~~109~~ left out
K. Descriptions of Colleges and Universities ~~111~~ 98


Don Bosco College
Immaculate Conception Seminary
Alphonsus College
Salesian College
Felician College
Paterson State College
Bergen County College
Morris County College
Luther College
Englewood Cliffs College
Centenary College for Women
Tombrock College
Montclair State College
Fairleigh Dickinson University
Caldwell College for Women
Northeastern Collegeiate Bible Institute
Assumption College for Sisters
Villa Walsh College
Bloomfield College
St. Michael's Monastery
College of St. Elizabeth
Upsala College
Drew University
Seton Hall University
Stevens Institute of Technology
Jersey City State College
St. Peter's College
Newark State College
Mt. St. Mary College
Union College
Essex County College
Newark College of Engineering
Rutgers University
Seton Hall University
New Jersey College of Medicine & Dentistry
Somerset County College
Alma White College
Middlesex County College
New Brunswick Theological Seminary
Rutgers University
Brookdale Community College
Princeton Theological Seminary
Princeton University
St. Joseph's College
Westminster Choir College
Monmouth College
Mercer County College
Rider College
Trenton State College
Georgian Court College
Burlington County College
Rutgers University
Ocean County College
Gloucester County College
Camden County College
Glassboro State College
Richard Stockton State College
Atlantic County College
Cumberland County College
Shelton College

Note: The new State College North will be located in Bergen County.

Chapter I

PLANNING FOR HIGHER EDUCATION IN NEW JERSEY

A major responsibility of the Board of Higher Education is to foster planning. The Higher Education Act of 1966[1] directs the Board to "advance long-range planning for the system of higher education" and gives it specific responsibility to "develop and maintain a comprehensive master plan." The Board's concern with planning, therefore, extends beyond the preparation of a master plan, essential as that is. The Board has an equally compelling responsibility to encourage effective planning in everything which the institutions of higher education undertake, whether it be the design of facilities, the development of curricula, or the establishment of new institutions. Throughout higher education in New Jersey, the Board has the objective of encouraging careful thought, close cooperation, and the most effective use of resources.

THE NEED FOR PLANNING

The need for planning in most human activity is widely accepted today. Few question its value or importance. But it is useful to keep clearly in mind why planning is important and, in particular, why it is so important for the future of higher education, both in the nation and in New Jersey.

Most fundamentally, planning is the way by which institutions can act to shape the forces of growth and change. Without planning, growth is haphazard and change chaotic; goals remain unidentified and unfulfilled, and resources are wasted. Planning enables institutions both to recognize and deal with the pressures and currents which affect them and to move directly toward clearly defined goals.

Higher education today is compelled to plan, because it has been undergoing since the 1950s a dynamic and turbulent period of change. The end of this period of change is not in sight. For at least the next decade, higher education will continue to experience extremely rapid growth in size, importance, complexity, and cost.

Enrollment in higher education has more than tripled since World War II. In the last ten years alone, the number of students has more than doubled, from 3.5 million students in 1959 to an estimated 7.5 million in 1969. This growth will continue; by 1975, experts forecast that 10 million students will be enrolled in the nation's colleges and universities. This explosive growth is due in part to the increase in population, but even more important is the increasing percentage of young people who are seeking and obtaining an opportunity for postsecondary training.

In a society increasingly dependent on knowledge and technology, our colleges and universities are assuming a more critical and multifaceted role in society. Upon them rests a major responsibility for expanding and transmitting the store of man's knowledge and for educating and preparing young men and women for the social, economic, scientific, and political complexities of the future.

This growth in size and importance has also made higher education increasingly complex. A large number of institutions and new campuses have been created. New types of institutions with newly defined roles, such as upper level colleges and research institutes, are taking on more importance. Colleges and universities have assumed new responsibilities in urban affairs, in applied research, and in extending higher education to the disadvantaged. New specialities and subdisciplines have developed in all fields of knowledge. All these developments have made the spectrum of higher education — and the institutions within it — more complex.

---

[1] Title 18:21A - 1 to 18:21A - 44, chap. 302, P.L. 1966 N.J.S.A.

Finally, all of the above factors have served to increase by many times the funds required for higher education. According to a recent report of the Carnegie Commission on Higher Education, institutional expenditures rose from $5.2 billion in 1957-1958 to about $17.2 billion in 1967-1968; by 1976-1977 expenditures are estimated to rise to $41 billion, an increase of almost 800 percent over the two decades. This increase in costs is due not only to the expansion of higher education. It also reflects a steady increase in cost per student, which is due in part to the costs associated with higher education's new responsibilities, in part to increasingly expensive teaching tools such as computers and libraries, and in part to rising salary and other costs.

Through planning, higher education can shape its future, avoiding developments that would be unfortunate and facilitating others that would be advantageous. Planning is a basic, indispensable, and continuing process. It must go on at every level: within each department or division; at each college and university; and, in the evolving master plan, for the New Jersey system of higher education as a whole.

PLANNING TO DATE

Since the Board assumed its responsibilities in July 1967, significant progress has been made in advancing planning within the New Jersey higher education system. The following can be considered among the major accomplishments so far:

A consulting firm, Robert Heller Associates, completed a major study of future demand for higher education in New Jersey. The study showed that demand for undergraduate education would increase by more than 50 percent by 1975 and recommended that 83,000 additional places be created (12,000 at independent and 71,000 at public institutions), more than doubling the present capacity. The study also recommended significant expansion of graduate and professional education.

The Board of Higher Education issued a *Facilities Plan* in May 1968. The *Facilities Plan* concluded that approximately $500 million in state funds for new facilities are required by 1975. Voter approval of the bond issue of $202.5 million in November 1968 provided the first step toward meeting that requirement.

The Department of Higher Education has made significant progress in developing a comprehensive data base on New Jersey higher education, including essential information on students, faculty, facilities, and finances.

Rutgers University has completed its first comprehensive educational plan and has plans to expand and refine its planning process in the months ahead.

The six state colleges, with assistance from consultants, are developing a computer-based planning capability which will permit precise planning of future facility requirements.

As part of this effort, the state colleges have developed their first statement of goals and policies to guide their future development.

The Department of Higher Education, in cooperation with the Association of Independent Colleges and Universities in New Jersey, has begun a process in which the plans and objectives of the independent institutions of the state can be given full recognition in future statewide planning.

The Council of Community Colleges has been working in several areas to improve coordination of planning efforts among the thirteen public community colleges.

These efforts and others have strengthened the information and planning base of the New Jersey system. Much still needs to be done, but the efforts of the last two years have created a firm foundation on which planning can advance.

THE PLANNING PROCESS

The Board of Higher Education has the specific responsibility for preparing a master plan for the development of the New Jersey system of higher education. Before discussing the master plan, it is important to understand clearly the nature of the planning process.

In all planning, three fundamental questions must be answered. Although the questions are simple, the answers are complex and require a great deal of information, extensive analysis, and careful judgment.

1. Where are we? What is our current position?

Before considering the future, extensive information must be collected on where a system or institution stands at the present point in time. This is the inventory stage.

2. Where should we go? What are our goals?

The second step is to decide on the appropriate goals. Planning cannot go forward until objectives are decided.

The establishment of goals requires understanding and judgment. Goals must be based on a broad conception of the trends and developments taking place in society. Goals necessarily reflect values and are therefore difficult to formulate. Nevertheless, the establishment of goals is the crucial step in the planning process, and it is in the effort to reach the goals that all planning decisions are made.

3. What is the best way to achieve the goals?

It is in answering this third question — in deciding how to reach the goals — that a plan takes final form. The proper approach requires a full consideration of major policy alternatives and a careful examination of their implications. The advantages and disadvantages of different approaches must be carefully weighed, and priorities must be set. The result of this stage of the planning process should be a comprehensive statement of the policies and priorities to be followed in order to move toward the goals. A plan should also contain an estimate of the resources required.

A CONTINUOUS PROCESS

It is also important to realize that planning must be a continuous process. The current position of an institution or a system changes; the perception of the necessary and proper goals may shift; and conclusions about policies and priorities may undergo change as a result of new answers to the first two questions or because of new factors to be taken into account.

Publication of a plan is not the final step in the planning process. Rather, the planning effort must be subject to continuous development and review if it is to remain relevant and current.

FULL INVOLVEMENT

One principle is central to effective planning. The planning process must provide for full consultation among all persons and institutions affected. That is not to say that a plan can or should reflect every view or that it should be a compromise among them. But all views and approaches must be considered before the final decisions are made.

NEW JERSEY'S MASTER PLAN FOR HIGHER EDUCATION

An appreciation of this approach to planning is necessary in order to understand the way in which the Board of Higher Education is proceeding in the development of the master plan for higher education in New Jersey.

In this document, the first of a series, the Board has concentrated on providing answers to the first two questions: Where does the New Jersey higher education system stand at this point in time? What goals must the system strive to meet?

The sections of description and analysis set forth the current situation of New Jersey higher education. First, they provide a description of those attributes of New Jersey which are of particular importance to higher education planning. Second, they summarize and analyze the most important aspects of the system at the present. Taken together, these sections provide a comprehensive base line for planning for the future.

This information is necessary for the Board's planning in the months ahead. But it is expected that this information will also be useful to many persons in the higher education community and to other interested citizens who wish to understand the current position of New Jersey higher education.

Of prime importance is the section on goals. Here the Board has set forth the ten goals toward which New Jersey higher education must strive. The establishment of these goals has involved considerable effort. The higher education community has been discussing these goals since early 1969, and a special committee,[2] composed of members of the Board, representatives of the higher education community, and leading citizens, has spent several months in its final formulation. The goals are stated briefly and simply, but they represent a great challenge and a great opportunity for the citizens of New Jersey.

The development of a data base and the establishment of goals are the first two steps in the development of a master plan. The third step — deciding how to reach the goals — still lies ahead. The Board is already proceeding with this step. It cannot be accomplished in a single study or a single document; the considerations are too complex. Instead, the Board plans to develop the master plan as a series of studies and policy statements which will be issued over the months ahead. These documents, taken together, will make up the first master plan for higher education in New Jersey.

NEW JERSEY'S SITUATION — A PERSPECTIVE.

As a prelude to the statement of goals, the Board offers here, in brief form, its view of the current position of New Jersey higher education and the prospects for the future.

This document shows, as every past study has shown, that New Jersey higher education is not meeting the needs of the citizens of the state. Less than 50 per cent of our undergraduate students can be accommodated in colleges in New Jersey; our opportunities for graduate and professional education are still inadequate; and New Jersey still ranks very poorly in terms of per capita state government expenditures on higher education.

New Jersey was very far behind in its national standing at the time it decided to create a higher education system adequate to its needs. Consequently, although progress has been made in recent years, the state's national rank has not changed in measures of expenditure for education.

---

[2] The Board wishes to express its great appreciation to the members of the Committee on Goals for the diligent work which each member contributed during the several months the group was working. Members of the committee included:

Mr. Edward Booher, Chairman, Board of Higher Education
Mrs. John H. Ford, Vice-Chairman, Board of Higher Education
Mr. Ralph A. Dungan, Chancellor of Higher Education
Dr. Richard Schlatter, Provost, Rutgers University
Dr. Walter Lincoln Hawkins, Chairman of the Board of Trustees, Montclair State College
Dr. James Mullen, President, Jersey City State College
Mrs. Maxine Colm, Chairman, Council of County Colleges
Dr. Sherman Masten, President, County College of Morris
Dr. J. Osborne Fuller, President, Fairleigh Dickinson University
Mr. Jeremiah Farrington, Assistant to the President, Princeton University
Dr. Robert Cadmus, President, New Jersey College of Medicine and Dentistry
Dr. William Hazell, Vice-President and Dean, Newark College of Engineering
Dr. James Flynn, Academic Dean, Alphonsus College
Dr. Albert Meder, Executive Associate, Association of Independent Colleges and Universities
Dr. Elmer Engstrom, Chairman, Executive Committee, RCA
Mr. Gustav Henningberg, President, Greater Newark Urban Coalition

To understand the current position, it is important to remember New Jersey's history and its heritage and how it differs from states in other sections of our nation. New Jersey was one of the original thirteen colonies. Princeton and Rutgers were educating students before our nation was founded. Hence, New Jersey began with a strong commitment to independent private higher education. As in all states of the Northeast, higher education was considered primarily a private matter and not a proper concern of the state.

Some other states, never having had the benefit of an extensive private system of higher education, took a different approach. They developed and placed reliance on public institutions of higher education. Although certain states in the Midwest had private systems of higher education from the start, they also developed strong public systems of higher education to complement the existing private system.

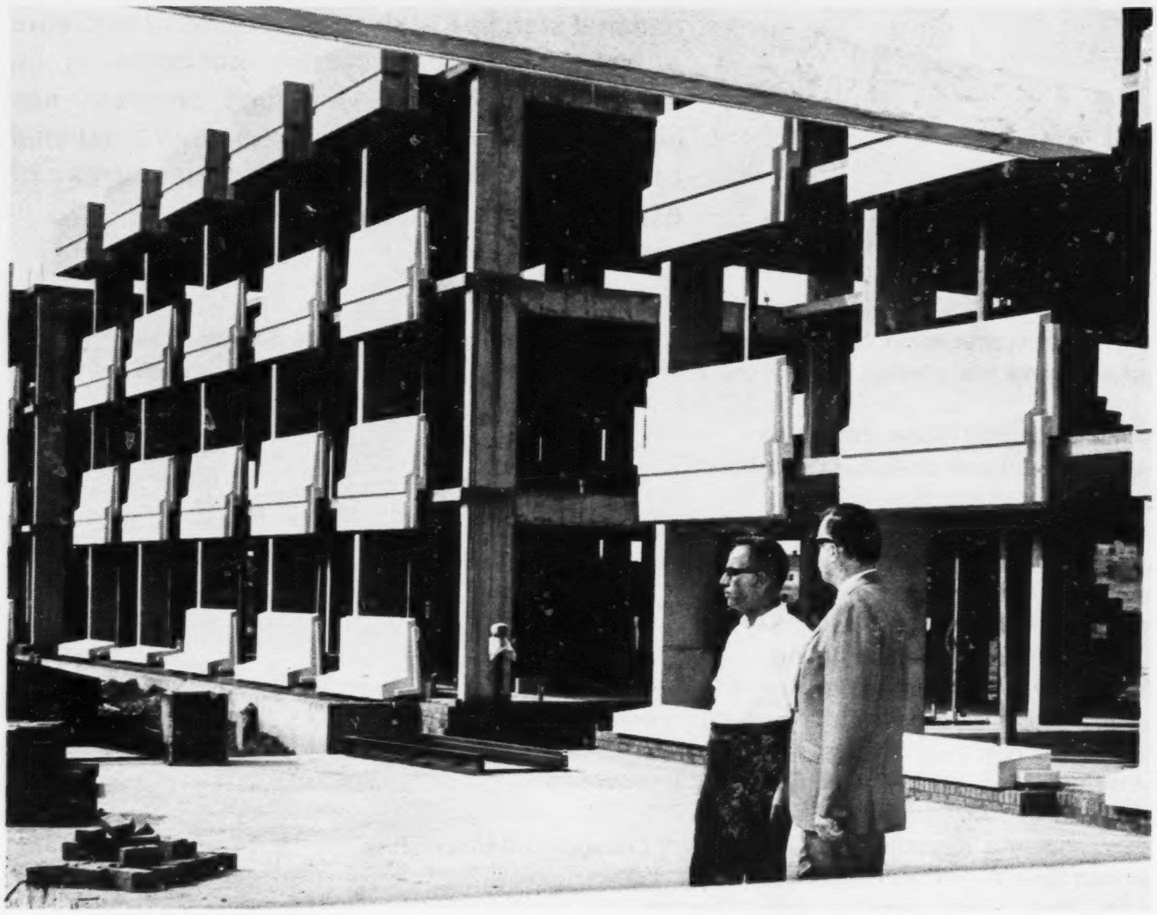
These differing historical patterns became very important at the end of the Second World War when, for a variety of reasons, the pattern of college attendance changed dramatically. Higher education suddenly was demanded by an increasing proportion of high school graduates. More important, extensive availability of higher education was recognized as being essential to a healthy society, both socially and economically. Expanded facilities were required to accommodate the greater numbers of college age youth and the greater demand for a college education. Those states with a tradition of state supported services took action to meet the need for expanded higher education opportunities. In the Eastern states, private institutions expanded as their resources permitted, but acting alone they could not meet the demand. Meanwhile state funding of public institutions was not forthcoming. In these years states like New Jersey fell behind.

Changes in philosophy take time. But New Jersey's philosophy has changed. During recent years New Jersey has made an accelerating commitment to the goal of a greatly expanded higher education system. To mention only the highlights:

—in 1958 the voters approved a $66.8 million college bond issue.

—in 1959, the State Scholarship and Student Loan programs were established.

—in 1962, legislation to establish a system of county community colleges was enacted.



There are now, only seven years later, thirteen of these colleges in operation, enrolling nearly 22,000 students.

—in 1964, the state accepted the responsibility of supporting the first state medical school.

—in 1964, the voters approved a $40.1 million college bond issue.

—in 1966, the Higher Education Act was adopted. It established the New Jersey system of higher education, created the Board and Department of Higher Education, and began the transformation of the state colleges into multipurpose institutions.

—in 1968, the voters, by a 2 to 1 margin, affirmed their support of an expanded higher education system by approving a bond proposal that included $202.5 million for higher education. Also in 1968, the State enacted the Educational Opportunity Fund and the Tuition Aid Grant program to assist disadvantaged students and students at independent institutions in financing their college education.

In terms of total enrollments and per capita expenditures, New Jersey over the last ten years has done little more than maintain its position relative to other states. But in other respects, important steps forward have been taken to create or maintain the essential prerequisites for building a strong system of higher education.

WHAT ARE THESE PREREQUISITES?

The first prerequisite is a viable system which is comprehensive and effective and which strikes the proper balance between central coordination and institutional independence. New Jersey created such a system through enactment of the Higher Education Act of 1966.

The New Jersey system includes all institutions, public and private, at all levels of higher education. By design, the New Jersey system combines the advantages of both unity and diversity: unity, in that the single system makes possible the maximum cooperation, coordination, and sharing of resources among institutions; and diversity, in that the New Jersey system is dedicated to assisting institutions to develop their own specialized strengths and unique identities.

The New Jersey system has the advantages of a simple and direct form of state organization. It has one Board responsible for coordinating all of higher education. It has a single, cabinet level department composed of specialists giving full attention to assisting the colleges and universities in the state. And each institution, public or independent, has its own governing board with authority to develop that institution in an imaginative and creative way within the framework of the system.

The importance of this pattern of relationships cannot be overestimated. Many other states are experiencing grave difficulties in establishing clear policies because of rivalries and conflicts among groups of higher education institutions. New Jersey is fortunate in being able to reap the advantages of a single system from this stage on its development.

The second prerequisite is sufficient resources to create an excellent system of higher education. New Jersey has the necessary resources. On the one hand, New Jersey is a wealthy state consistently ranking among the top ten states in the personal income of its citizens. On the other hand, the state government has only begun to use its tax potential, consistently ranking forty-ninth or fiftieth in per capita state tax collection. (If all taxes are included, New Jersey ranks thirty-sixth in taxes as a percent of personal income.) New Jersey can provide the funds needed to develop higher education without straining its economy.

The third prerequisite is public support for the creation of a higher education system equal to the needs. New Jersey has demonstrated such support. The people understand the importance of higher education opportunities. They want their children to have the benefit of a system of the first rank. The voters have supported three bond issues for higher education, the most recent one in 1968 by a 2 to 1 vote.

In summary, New Jersey has established an effective system of higher education. The state has the resources to create an excellent system. And the citizens of the state have demonstrated their support. Therefore, it is with hope and confidence that the Board of Higher Education presents the following goals for the development of higher education in New Jersey.

Chapter II

GOALS FOR HIGHER EDUCATION IN NEW JERSEY

A great variety of post-secondary educational and training programs exist within the State of New Jersey. Some are offered by public institutions, some by independent colleges and universities, some by business enterprises for their own present or prospective employees. Some programs lead to degrees, some are open only to persons already holding the highest academic degree; some programs lead to certificates, some to no form of overt recognition at all; some are full-time programs, some are part-time; some are designed for young people just out of high school, some for adults.

One of the purposes central to the formulation of this master plan is to develop the system of higher education in New Jersey so that it is more than a collection of courses, programs or miscellaneous opportunities for educational activity.

Planning for higher education cannot cover every kind of post-secondary schooling. For instance, an industrial research laboratory, in programs given for its own staff by its own scientists, may well be engaged in a most significant form of higher education, but it would be difficult and of questionable value for a master plan to include such an educational activity.

The New Jersey system of higher education must include the post-secondary educational programs offered by all public and non-profit private institutions established, chartered, or otherwise authorized by law to offer instruction on the level of higher education. It is for these institutions that this plan exists.

The objective of this system, cooperatively planned under the leadership of the Board of Higher Education, is to assure the citizens of the state that appropriate provisions for satisfying their educational needs will be made.

These educational needs are more demanding and important than ever before in our history. This importance arises because of the unprecedented complexity of our time and the rapid changes by which our time is characterized.

Never before has education been so necessary for the development of the individual and his participation in society, for it is through education that man acquires the capacity to deal effectively with complexity and change. Education enables a person to achieve more fully his potential as a human being, and is essential for understanding and participating in the social, political, economic, and cultural life of our society.

Education benefits society as well as the individual. Our economy cannot operate without millions of highly educated persons. Our democratic political system is dependent on the responsible participation of educated men and women. The quality of our social and cultural life depends on the values and creativity of our educated citizenry.

Although there is no way of knowing the future, present trends indicate that complexity and change will continue to increase. If so, education, and especially higher education, will be of even greater importance in the years ahead.

The following goals are those towards which the New Jersey higher education system must strive if it is to meet the challenges of the future.

1. **To assure each individual the opportunity to be educated to the height of his potential.**

The first goal must be to assure each individual the opportunity to be educated to the height of his potential. If an individual is motivated to pursue and can benefit from education beyond the high school, an obligation rests upon the system of higher education to make sure that he can find a place in a suitable program. A further obligation is to assure so far as possible that an individual is assisted by counseling and evaluation to find a program appropriate to his abilities and motivation.

Each type of program must have its own admission standards and appropriate means for selecting students. Such flexible approaches to student selection, combined with the inauguration of many new types of programs, will increase each person's opportunity to obtain benefits from higher education.

The emphasis in New Jersey at this time must be on the initiation and expansion of many different kinds of programs. New Jersey has the resources required to make available adequate higher educational opportunities for the citizens of the state, by initiating new styles and modes of education, by creating new programs, by expanding existing programs, and, where limited demand or other factors so indicate, by assisting its citizens to enroll in institutional programs beyond the bounds of the state. Such an investment in higher education will yield untold benefits to individuals and to society.

2. **To eliminate financial barriers.**

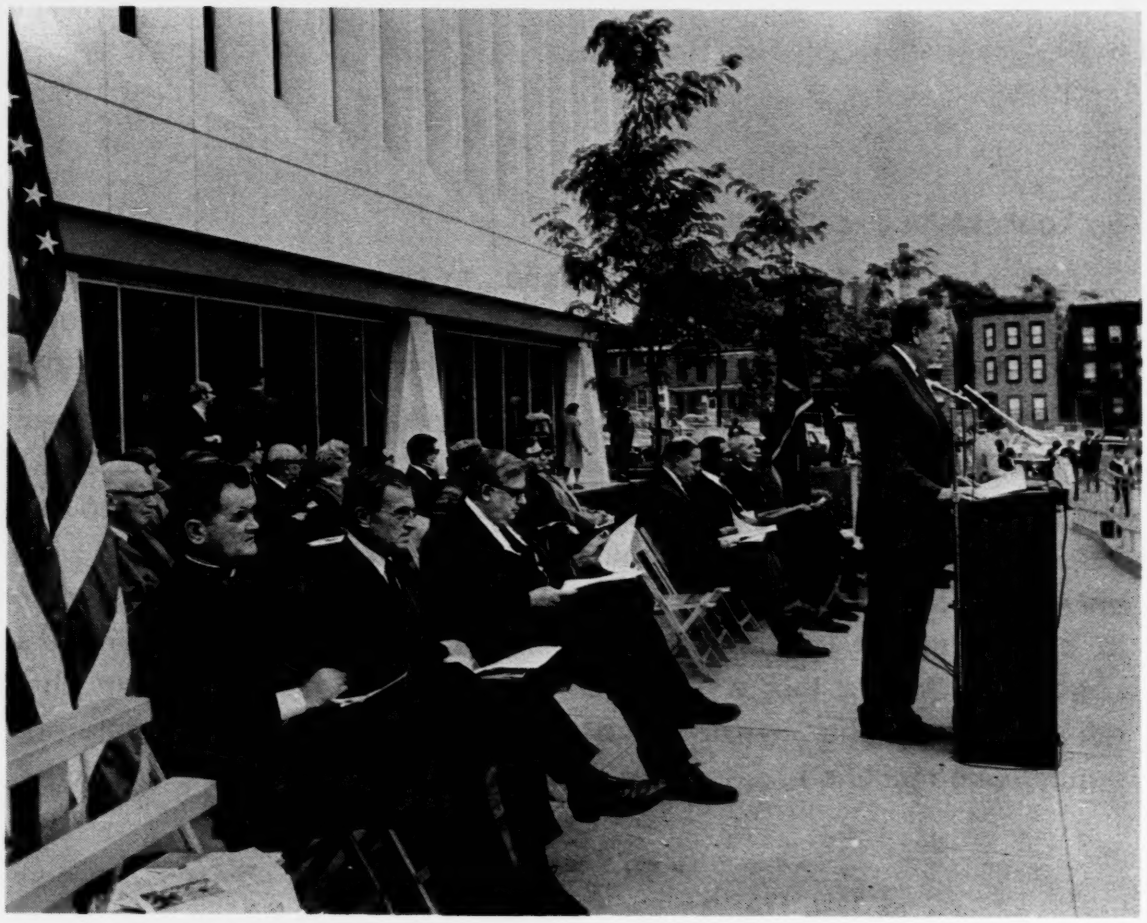
The development and expansion of higher education programs in itself cannot assure the availability of a suitable educational experience for every motivated individual. There must exist also the assurance that access to educational opportunities will not be foreclosed because the individual lacks the financial resources to take advantage of them. Many young men and women have difficulty in financing higher education, and large numbers find it impossible. Appropriate supplementary assistance must be provided so that no citizen of the state will be prevented because of financial considerations from entering upon any program for which he is qualified.

3. **To foster diversity and flexibility.**

The third goal sets forth explicitly what is implicit in the first goal, namely, that as the system of higher education expands, diversity, flexibility, and responsiveness to new needs must be fostered both as a characteristic of the system itself and, in accordance with their institutional objectives, within the several institutions comprising the system.

Higher education in New Jersey must accommodate a wide variety of students. Already the system encompasses two year community and junior colleges, four year public and private institutions, public and private universities, and a number of special-purpose institutions. These institutions offer a diversity of programs in liberal arts, technical studies and the professions, to undergraduate students, graduate students and adults. In future years increasing numbers of students of different ages, with different preparation, different objectives, and different abilities will require an even more diverse range of programs than exists today. Our institutions must develop in different directions to meet these needs.

Diversity among institutions must be complemented by diversity within institutions. In the past higher education has tended to segregate students of different ability levels at different institutions. For some institutions this is appropriate. Many institutions, however, will be benefited by seeking a greater variety of programs which will result in a more heterogeneous educational community, composed of students from many backgrounds. From an educational point of view and to provide reciprocity with states educating New Jersey students, it would be very desirable if a greater number of students came from out of state.



4. **To foster an integrated system of public and private institutions.**

The fact that the New Jersey system of higher education includes all organized programs conducted by institutions chartered by the state implies both a goal of planning, to foster an integrated system of public and private institutions, and a concomitant responsibility on the part of the institutions and the state. Each college and university must recognize that it is a part of a system, and must formulate its own plans cooperatively with other institutions and of the system as a whole. Similarly the state must recognize its responsibility to nurture all institutions in the system, and exercise its powers to encourage needed developments, to discourage unsound expansion, and to effect coordination and articulation among individual institutions as well as between the private and the public sectors.

Public and private institutions differ in certain important ways, and these differences must be respected. Moreover, each institution — public or private — has a unique role to play. Nevertheless, all colleges and universities, whatever their history and pattern of governance, must contribute to their maximum within the framework of the system if the state is to meet its educational needs in the years ahead. This integrated system must sustain the proper balance between cooperation and coordination on the one hand, and initiative and independence on the other.

As each institution continues to develop its own identity, it must guard against rigidities which hinder its ability to change. Higher education must be sensitive and responsive to social change, as must professional associations and other institutions which establish standards for education programs. New Jersey colleges and universities must be open to new techniques and approaches to teaching, research, public service, and institutional governance. To remain vital, the New Jersey system of higher education must constantly strive to find new ways to improve itself.

5. **To strive for excellence.**

All concerned with higher education in New Jersey must strive to achieve and maintain excellence. Excellence here does not refer to the selectivity or level of a program or institution, but to the quality of performance, relative to the objectives an institution has set for itself.

The achievement of excellence in any area and to any extent requires a commitment to quality on the part of trustees, administration, faculty, students and the constituency of an institution. Each faculty member should expect to give of himself to the limits of his abilities in personal scholarship, in his teaching relationships with students, and as a member of the university community at large. Each student in every program in every institution should expect to be challenged to the limits of his abilities and should be expected to respond to this challenge. Only in this way can the individual and society attain the full benefits of higher education, and the investment of the state and of private enterprise in providing higher education be justified.

6. **To help meet the needs of society.**

Higher education must give students the knowledge and skills necessary to participate effectively in our rapidly changing society. To do so, the system must be attentive to the anticipated requirements for technicians and professionals, scientists and humanists, specialists and generalists. It must be attentive to the need for humanely educated men and women who are responsible and creative citizens. Higher education will best serve both the individual and society by preparing and retraining citizens to play productive roles in our society's political and economic life.

It is neither wise nor beneficial for educational programs to be planned solely in anticipation of state manpower needs. National needs for educated manpower are of even greater importance. The nation's population is extremely mobile. While New Jersey has some special manpower requirements which must be satisfied to ensure continued prosperity, the state has the broader responsibility of establishing programs that will make an appropriate contribution to the requirements for educated manpower in a national context.

7. **To encourage research and the advancement of knowledge.**

The advancement of knowledge is a major concern of higher education. Indeed, a concern with this matter might well be taken as an important distinguishing characteristic of higher education as contrasted with elementary and secondary education. Research and scholarship contribute importantly to the progress of society as well as to the vitality of teaching and the pursuit of excellence.

The advancement of knowledge encompasses many forms of inquiry, including extension of the frontiers of knowledge and reexamination of the knowledge of the past. The nature and scope of these activities will vary with the individual and the institution. Institutions offering advanced graduate programs will necessarily have a commitment to theoretical research. At other levels, scholarship and research are likely to be more closely related to the subjects being taught. Institutions may also choose to pursue research activities related to community problems. The choices will, of course, depend on the interests of the faculty and students in our institutions of higher education.

8. **To sustain academic freedom.**

The advancement of knowledge and the dispassionate examination of ideas, vital as they are to the welfare of higher education, can flourish only in a climate in which free inquiry by responsible and competent scholars is encouraged, and in which the right of students to learn and teachers to teach without repressive restraints is equally cherished. Such a climate is conventionally described by the term "academic freedom."

For the welfare of the New Jersey system of higher education, of the individual institutional components, of the faculty members and students comprising their communities, and of society itself, to say nothing of the American democratic ideals of freedom under law, the maintenance of academic freedom must be an imperative planning goal.

Academic freedom — the right to teach and to learn without repression — carries with it the correlative obligation of exercising this freedom responsibly, of weighing evidence, of respecting the rights of others and of sharply distinguishing between personal opinion and professional judgment, between advocacy and scholarship. These obligations, too, must be sustained.

It is doubly important today to stress the goal of sustaining academic freedom and its correlative obligations, because recent confusion and turmoil on our campuses may have obscured our clarity of vision with respect to these matters. While campus unrest has a variety of causes, and while frustrations have occurred, society dare not let temporary turmoil and frightening frustrations lead to actions that would negate or undermine the basic character of higher education. Colleges and universities are organized for and dedicated to the pursuit of truth; this pursuit can be carried on only under conditions of freedom, and society itself as we know it could not survive the destruction of these institutions, either by hampering restrictions or overt attack.

9. **To contribute to the well-being of the community.**

As an institution of higher education must require of society a climate of academic freedom in which to pursue its goal, so it must in return recognize that it does not and cannot live in isolation from society. It must contribute to the well-being of the community. It must be aware of the pressing social, economic and other problems of the community — the local, regional, state, national and world communities. It must expect to participate in appropriate ways to assist these communities to solve their problems. This obligation is likely to be particularly pressing at the local level, where institutional and community interaction is most apparent.

Since the primary functions of higher education are to teach and conduct research, the contribution of an institution of higher education to its community should be sought in these areas of competence and concern. To help a community to define and understand the nature of its problems, to educate citizens for community leadership, to encourage teachers and students to identify themselves with community activities — these are activities institutions should offer and communities should expect. But colleges and universities are not designed as agencies to implement solutions to local problems, and should not be expected to do this.

The capacities of the various New Jersey colleges and universities to help will differ, depending on their size, location, and resources, but all have the obligation to contribute to the well-being of the community.

10. **To use all resources to full effect.**

The needs of New Jersey in higher education are great. Quality education cannot be achieved or sustained inexpensively, and the investment of extensive resources is needed to attract competent people and to support their work.

At the same time the system of higher education must use its resources to full effect. Cooperative efforts among institutions and the sharing of institutional resources will be encouraged where appropriate. Similarly, specialization by some institutions will be encouraged in order to prevent unnecessary duplication of programs. The cooperative efforts of all the institutions of higher education will facilitate the effective use of the resources available to the system.

Conclusion

The colleges and universities of New Jersey, public and private, have from colonial times to the present day striven to provide higher educational opportunities within the bounds of the state, and they have done well what their resources permitted them to do. But the time for uncoordinated effort, limited by inadequate resources, hampered by lack of overall planning, and often guided by opportunistic considerations has passed.

The development of the New Jersey system of higher education is the overall objective of the master plan. The ten specific goals set forth above are designed to assure the development of a system of high quality, responsive to the needs of our citizens. Surely, the New Jersey system of higher education must be characterized by opportunities for the full development of every individual, unhampered by financial barriers; as well as by diversity and flexibility, including both public and independent institutions, each striving for excellence and seeking to help in meeting the needs of society. Research and the advancement of knowledge must be encouraged; academic freedom with its correlative obligations must be sustained as essential to the welfare of the institutions and society; a concern for community welfare must be fostered; and the effective use of all resources must be mandated.

To achieve such a system is imperative. New Jersey can no longer expect its young citizens to rely as heavily as in the past upon the resources of other states for their education, nor can it expect them to continue to pay on the average higher tuition and fees for education than is paid by the typical American student.

Manifestly, to provide these educational benefits for its citizens, New Jersey must vastly increase college opportunities within the state, as well as utilize available opportunities elsewhere, and to do these things must make a much greater commitment of state funds to higher education than in the past.

Such a commitment is an investment in the health, well-being and productivity of its people, in the continued growth of the economy, and in the welfare and strength of a democratic society. It may confidently be predicted that such an investment will be repaid many times over.

Traditionally, New Jersey has, as a matter of public policy, offered minimal state services in many areas, including higher education, in order to maintain state taxes on a level considerably lower than that found in most other states.

In an era when higher education was not the individual and social necessity that it is today, a policy of restricted state provision for higher education may have been better justified. But today a policy which would deprive thousands of New Jersey young people of the opportunity for a college education for the sake of economy in state government is unthinkable. New Jersey must have a system of higher education which meets the goals set forth in this master plan, and the state has the capacity to mobilize the resources needed to establish such a system.

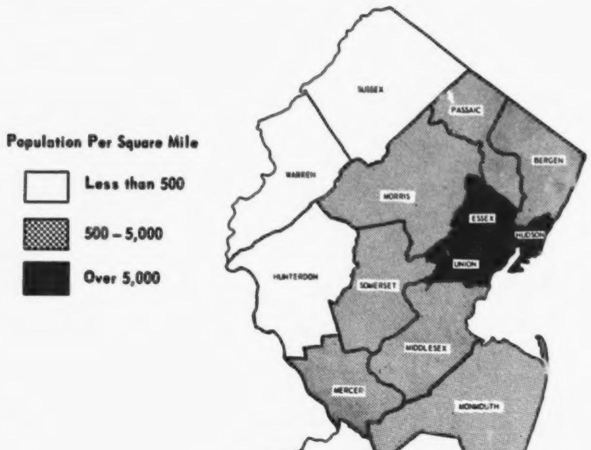
Chapter III
THE NEW JERSEY ENVIRONMENT

INTRODUCTION

In order to set the stage for discussing the New Jersey system of higher education, it is necessary to describe the demographic, social, and economic environment in which the system is located and which it exists to serve. This section will describe trends in New Jersey's population growth, economic activity and ability to support higher education.

In brief, New Jersey is a densely populated state with a high rate of population increase, especially in suburban areas. This growth in population, when added to the increasing aspirations for college education of an ever larger portion of the population, creates a tremendous demand for increased higher education opportunities. At the same time, the state has a strong and diverse economy with enormous needs for trained people in almost every field. Finally, the strength of the state's economy and the relatively high incomes of its citizens mean that it has the financial resources needed to build and maintain a comprehensive system of higher education of excellent quality.

FIGURE 1
N. J. POPULATION DENSITY BY COUNTIES – 1968



Source: "Population Densities Per Square Mile," Population Estimates, 1968, N.J. Department of Conservation and Economic Development, p. 10.

POPULATION PATTERNS AND TRENDS

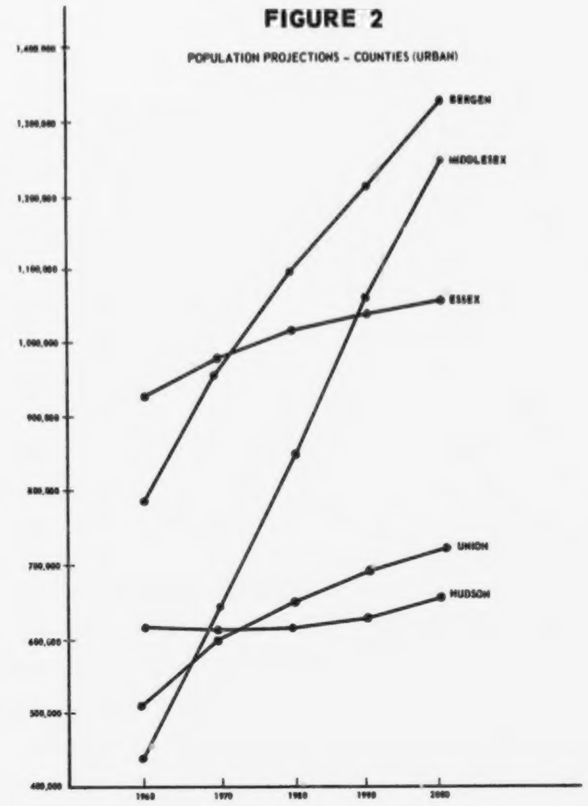
New Jersey's population has increased at each census since the Depression at a rate higher than that of the nation. In 1968 New Jersey's population was just over 7 million, and it is estimated that this figure will swell to over 10 million by 1990. Almost 90 percent of New Jersey's residents live in urban areas with most of the population concentrated in the northeast and central counties which form the New York-Philadelphia corridor (Fig. 1). The average population density of 959 persons per square mile is well above the national average of 50 and makes New Jersey the most urbanized state in the nation. However, large rural areas also exist in the northwest and southeast corners of the state.

As in the rest of the nation, most of New Jersey's population growth has occurred and will continue to occur in suburban areas. Although the urban counties continue to increase in population, several urban centers have actually experienced a decline in population during the past decade. It is growth in the suburban regions that accounts for the rapid population increase. The rural counties will also experience substantial development pressures and in some cases will maintain the higher growth rates typical of suburban New Jersey without, however, experiencing the substantial absolute increases found in the suburban areas. (See Fig. 2)

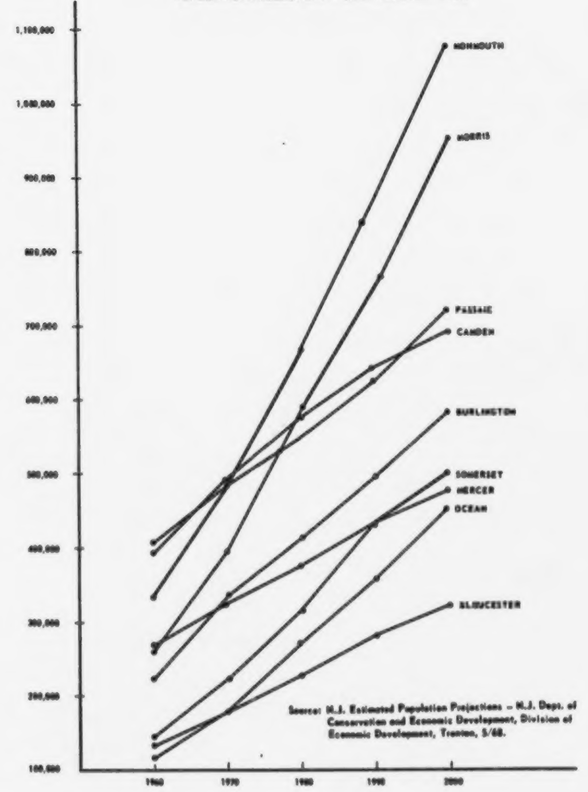
Perhaps even more indicative of the future impact of population growth in New Jersey is the age structure of the population. While the total population of the state increased by 26 percent during the 1950s, the number of persons aged five to nineteen years increased by 57 percent. The number of young people under eighteen years of age in New Jersey will continue to increase at a faster rate than nationally through 1985, and the college-age population in New Jersey will continue to increase through 1980. (See Figs. 3 and 4.)

These trends show that the demand for higher education in New Jersey will continue to increase in the coming decade. As a growing population demands greater postsecondary educational opportunities, the pressures on the presently limited system of higher education in New Jersey will mount.

FIGURE 2

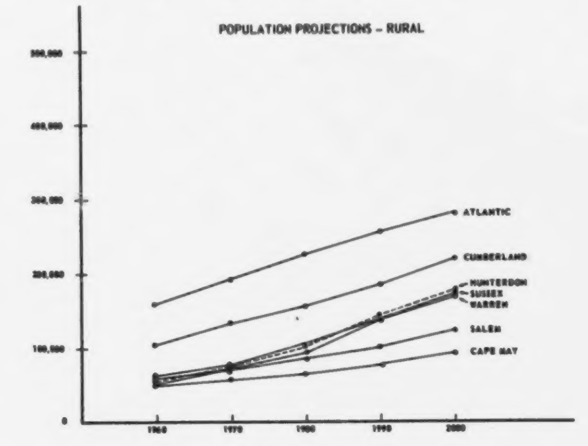


POPULATION PROJECTIONS – COUNTIES (URBAN)



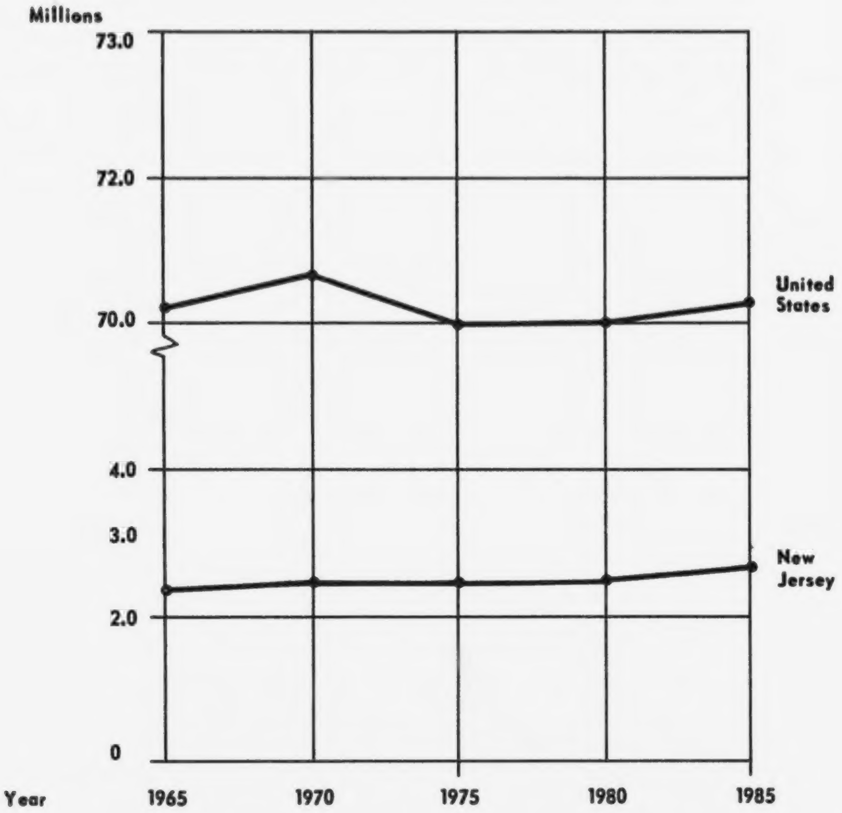
POPULATION PROJECTIONS – COUNTIES (SUBURBAN)

Source: N.J. Estimated Population Projections – N.J. Dept. of Conservation and Economic Development, Division of Economic Development, Trenton, 5/68.



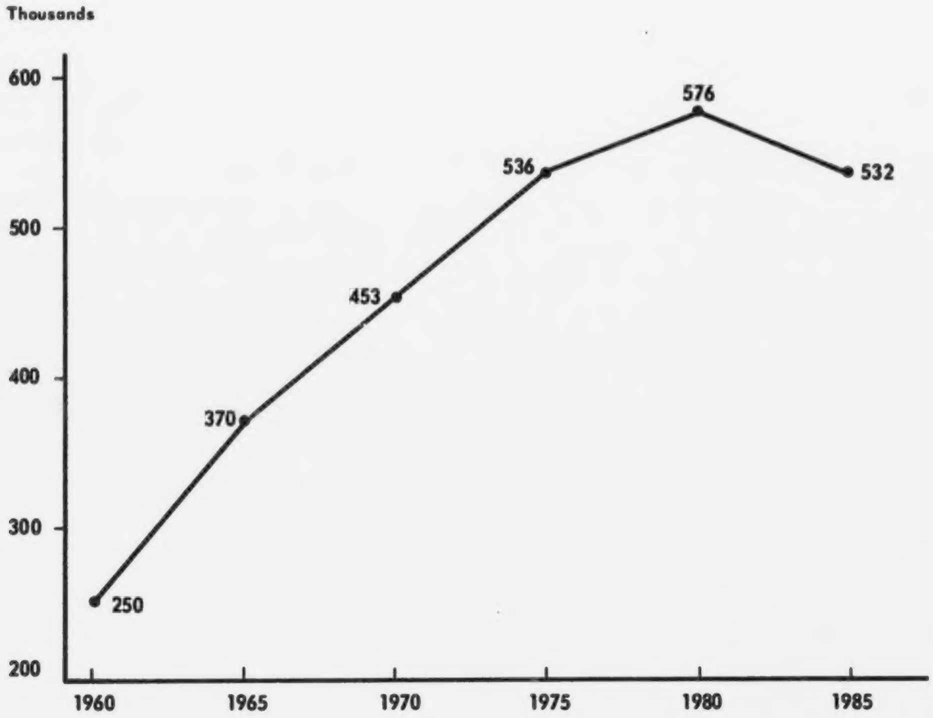
POPULATION PROJECTIONS – RURAL

FIGURE 3
POPULATION UNDER 18 YRS OF AGE, 1965 – 1985



Source: Population Estimate – Revised Projections of the Population of States, 1970-1985, p. 25, No. 375, U.S. Bureau of the Census, 1967

FIGURE 4
NEW JERSEY COLLEGE AGE POPULATION (18-21), 1960 – 1985



Source: Population Estimates – Revised Projections of the Population of States 1970-1985, (p. 25, No. 375) U.S. Dept. of Commerce, 1967.

NEW JERSEY'S ECONOMY

Although small in physical land area, New Jersey is the eighth largest state in population and ranks fifth in personal income of its residents. It is a highly industrialized and urbanized state. New Jersey also has large rural areas and contributes in a major way toward meeting certain agricultural needs of the state and the two major metropolitan centers of New York City and Philadelphia.

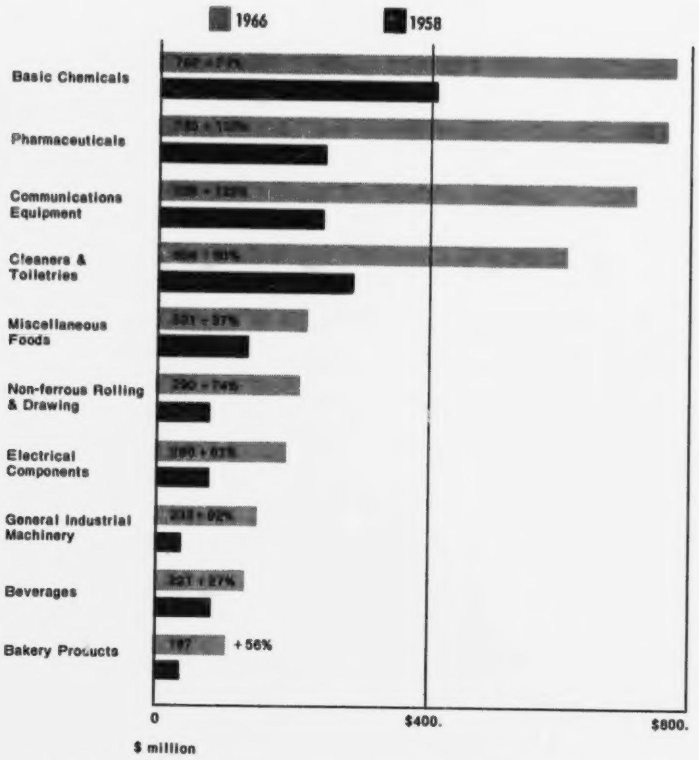
New Jersey has a strong industrial economy, ranking seventh in the nation in overall manufacturing. The state ranks first in the manufacture of chemicals and chemical products; fourth in petroleum and coal products, instruments and related products, and rubber products; and fifth in electrical machinery. All but the manufacture of petroleum and coal products are growth industries. (For value added by industry see Figure 5.) Over the long term, New Jersey's percentage of the total national value added by manufacturing has remained constant at between 5 percent and 6 percent. This is a strong performance compared to neighboring states; between 1909 and 1958 the New England states, New York, and Pennsylvania dropped nearly ten points in percentage of national value added by manufacturing. There is no evidence that New Jersey's economy is faltering.[1]

Commerce in New Jersey includes a wide variety of activities, such as retail and wholesale trade, banking, publishing, and government activities. Employment statistics indicate the importance of the commercial sector of the economy. In 1965, over 1.3 million persons were employed in the state's commercial organizations. This represented nearly 60 percent of New Jersey's nonagricultural employment. Within the commercial sector of New Jersey's economy, the service occupations and wholesale and

---

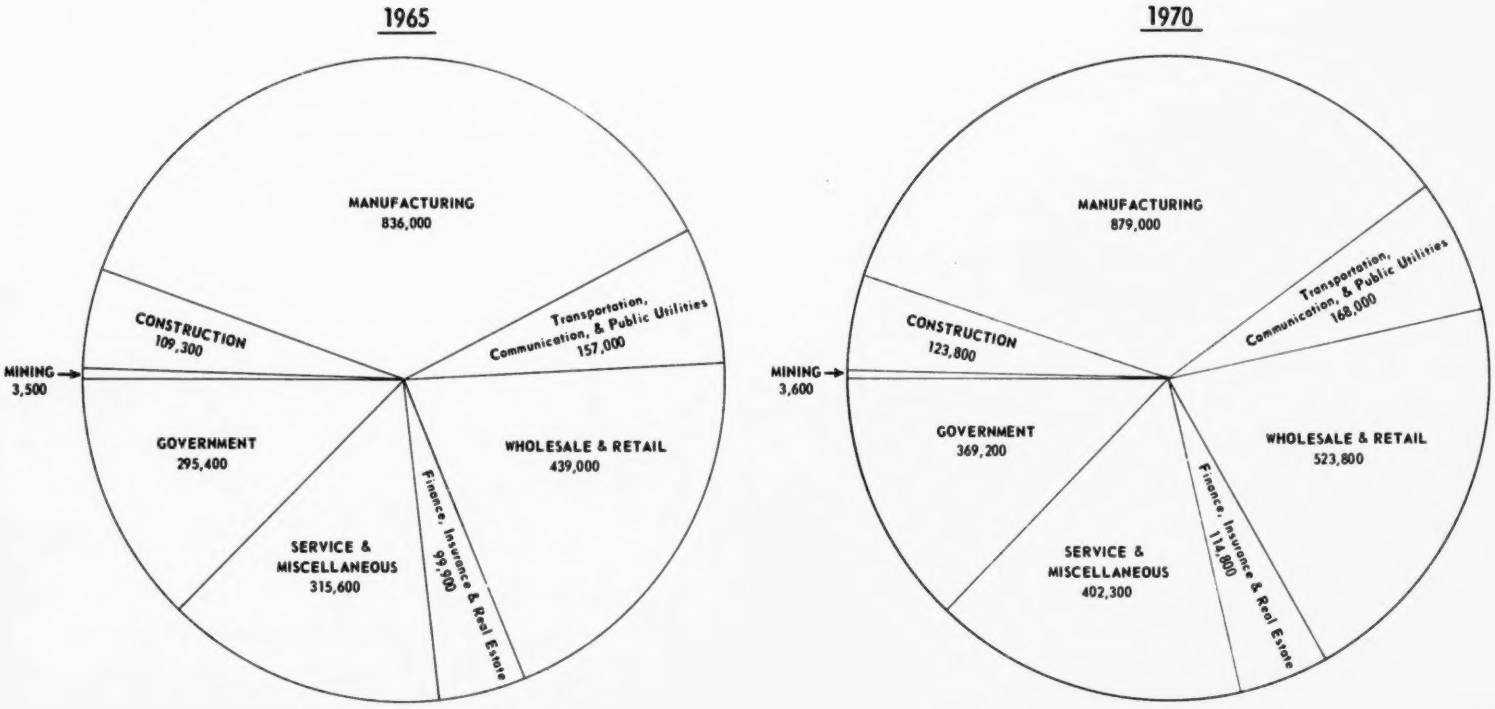
[1] "The Impact of Population and Economic Growth on the Environment of New Jersey," New Jersey Department of Conservation and Economic Development.

FIGURE 5
VALUE ADDED BY LEADING N.J. INDUSTRIES
GROWTH FROM 1958 TO 1966.



Source: The Economic and Social Impact of Pharmaceutical Mfgrs. in New Jersey; Hal P. Eastman, DBA, Graduate School of Bus. Admin., Rutgers University, 1968.

FIGURE 6
NON-AGRICULTURAL EMPLOYMENT IN NEW JERSEY
1965-1970



In 1965 Total Non-Agricultural Wage and Salary Employment Included 2,255,700 Persons

In 1970 Total Non-Agricultural Wage and Salary Employment is projected to include 2,585,300 persons

Source: "Manpower Projections 1965-1975," Department of Labor & Industry, Division of Employment Security, Research Series No. 20, December, 1968.

retail trade employ most of the workers. (See Fig. 6.) Furthermore, during the past twenty years, nonagricultural employment has increased most in service, government, finance, and trade occupations, while manufacturing has remained fairly stable. These trends parallel national trends. Between 1965 and 1975, the highest rates of employment increase are projected to be in service and government work.[2]

Although less than 10 percent of New Jersey's labor force was employed in farming in 1960, agriculture is still a vigorous and expanding industry in terms of production per farm and per acre. Commercial farms in the urban fringe specializing in livestock or in crops of high value (market vegetables, fruits, and nursery materials) are particularly productive. Poultry products, dairy products, and vegetables constitute about two-thirds of the total value in New Jersey's agricultural economy.[3]

---

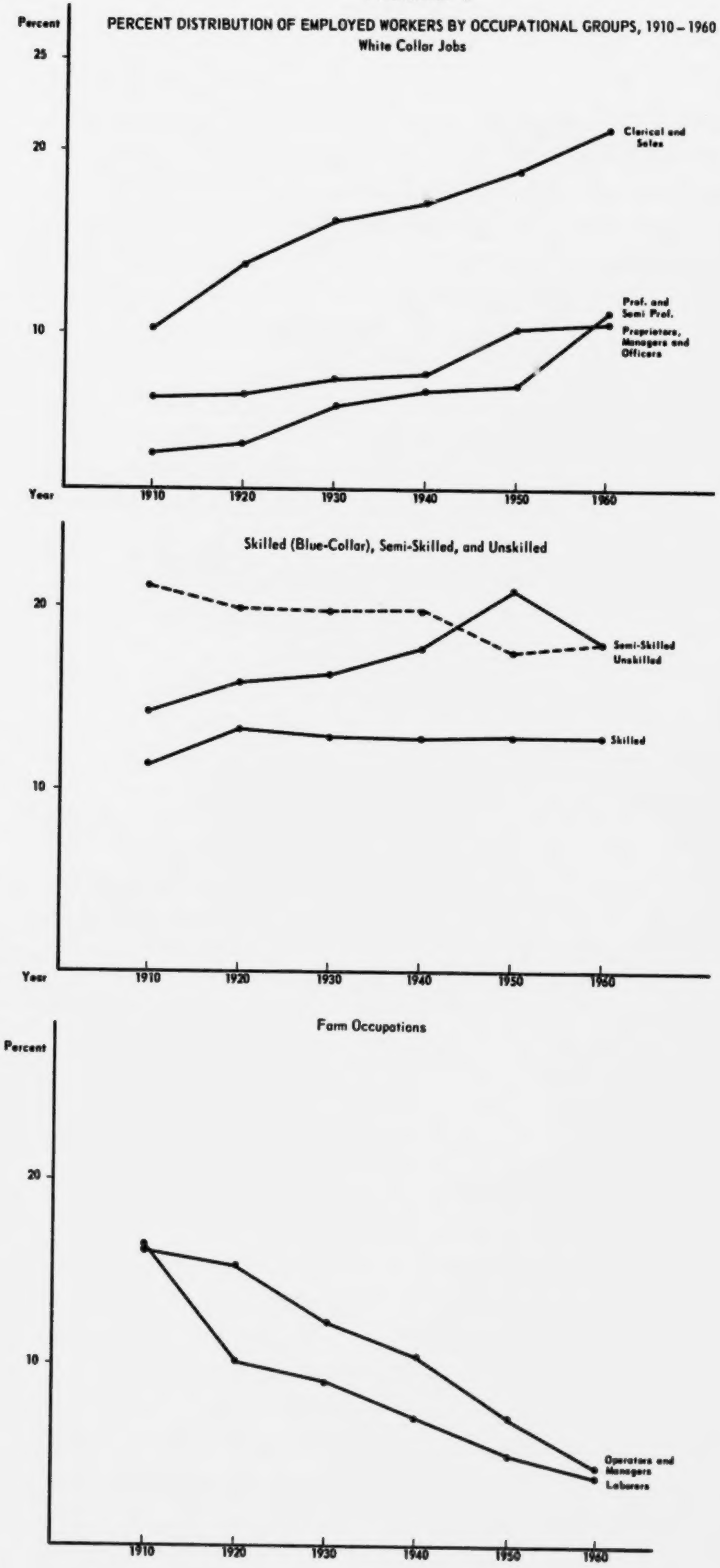
[2] "New Jersey Manpower Projections 1965-1975," Department of Labor and Industry, Research Series no. 20, December, 1968.

[3] "The Impact of Population and Economic Growth on the Environment of New Jersey," New Jersey Department of Conservation and Economic Development.

Data on the occupational structure of New Jersey contains some interesting implications for the future. Over the last fifty years there has been a rapid increase in the number of New Jersey residents employed in white-collar jobs. Since 1900 New Jersey's white-collar employment has increased by 652 percent as compared to a national increase of 420 percent. There has also been a diffusion of skills to a larger portion of the labor force. The proportion of skilled workers has remained stable during the last fifty years, but the growth of the semiskilled occupations has been largely at the expense of the unskilled occupations. The decline in farm employment indicates the shift in New Jersey to a highly industrialized economy.[4] (See Fig. 7.)

In summary, because of its industrial diversity, the presence of numerous growth industries, and the state's central location within the Eastern megalopolis, New Jersey has maintained a strong competitive position in the national economy, and the prospects for continued economic advance in the future are excellent. This means that the state's present considerable demand for trained manpower at all levels can be expected to increase as New Jersey's economy continues to grow in size and complexity.

FIGURE 7



PERCENT DISTRIBUTION OF EMPLOYED WORKERS BY OCCUPATIONAL GROUPS, 1910 – 1960

White Collar Jobs

Skilled (Blue-Collar), Semi-Skilled, and Unskilled

Farm Occupations

I – Professionalization of jobs – N.J. white collar employment increased by 652% since 1900 as compared to national increase of 420% – which means that increasing proportion of the population requires college training.

II – Skilled worker and foremen fairly stable while semi-skilled increased and unskilled decreased diffusion of some skills to larger segment of work force.

III – Decline in farm employment indicates need for more scientific farm management.

Source: The Impact of Population and Economic Growth on the Environment of N.J., Department of Conservation and Economic Development, 1965, p. 12.

---

[4] "New Jersey Manpower Projections 1960-1970," New Jersey Division of Employment Security, Department of Labor and Industry.

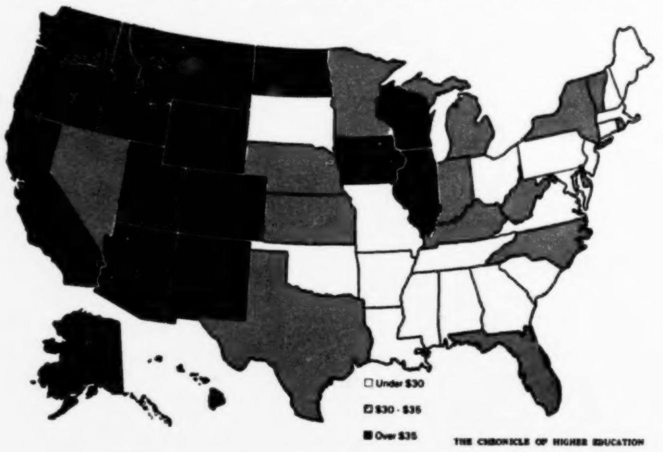
STATE SUPPORT FOR HIGHER EDUCATION

New Jersey has been making a greater effort during the last few years to support its expanding system of higher education. However, since New Jersey has historically invested relatively little tax money in higher education, these gains have not affected the state's position nationally.

In 1968, New Jersey appropriated over $95 million for operating expenses of higher education institutions. This was three times the 1960 appropriation. Nevertheless, New Jersey still ranked forty-ninth nationally in per capita appropriations for operating expenses for higher education. (See Fig. 8.) During 1968, ten states which are smaller in population surpassed New Jersey in *total* appropriations for operating expenses for higher education. Similarly, all other Eastern states except Massachusetts surpassed New Jersey in 1968 in *per capita* appropriations for operating expenses for higher education. Moreover, Massachusetts, New York, and Pennsylvania all have greater capacity in private institutions for their population than does New Jersey,[5] Massachusetts, New York, and Pennsylvania increased their appropriations for higher education by a far greater percentage during the past ten years than has New Jersey. (See Fig. 9 for national comparisons.)

The same general picture holds true for state support of community colleges. During 1968, twenty-nine states made appropriations for the operating expenses of two-year colleges. In terms of total appropriations, New Jersey was surpassed by ten of the twenty-nine states. In terms of per capita appropriations, New Jersey ranked eighteenth out of the twenty-nine states. (See Fig. 8.)

FIGURE 8
WHAT STATES SPEND, PER CAPITA 1969



THE CHRONICLE OF HIGHER EDUCATION

	Approp. Per Capita	Rank		Approp. Per Capita	Rank		Approp. Per Capita	Rank
Alabama	$20.74	45	Louisiana	$26.82	37	Ohio	$22.38	42
Alaska	47.69	3	Maine	26.93	35	Oklahoma	23.55	41
Arizona	39.41	8	Maryland	24.89	39	Oregon	43.24	5
Arkansas	23.98	40	Massachusetts	15.70	49	Pennsylvania	21.22*	44*
California	39.32	9	Michigan	34.92	18	Rhode Island	32.73	24
Colorado	42.59	6	Minnesota	34.72	19	S. Carolina	20.37	47
Connecticut	26.87	36	Mississippi	20.52	46	S. Dakota	27.87	32
Delaware	31.77	25	Missouri	27.65	33	Tennessee	22.06	43
Florida	31.72	26	Montana	38.83	11	Texas	30.94	27
Georgia	27.41	34	Nebraska	33.65	22	Utah	38.42	13
Hawaii	56.69	2	Nevada	33.06	23	Vermont	30.89	28
Idaho	41.88	7	New Hampshire	14.99	50	Virginia	26.21	38
Illinois	36.87	15	New Jersey	17.83	48	Washington	57.35	1
Indiana	30.20	30	New Mexico	36.98	14	W. Virginia	30.26	29
Iowa	36.55	16	New York	34.20	21	Wisconsin	39.21	10
Kansas	35.00	17	N. Carolina	34.65	20	Wyoming	46.28	4
Kentucky	30.02	31	N. Dakota	38.49	12	Total U.S.	$30.66	–

*Estimated

SOURCE: The Chronicle of Higher Education
This is the per-capita spending this year, by states, of tax funds for the operating costs of colleges and universities and the ranking of the states, based on current appropriations and the July 1, 1969, estimates of each state's civilian population by the United States Bureau of the Census.

Note: The above figures represent operating expenses; not capital construction. It is obvious, however, that there is a close correlation between the two.

Appropriations of State Tax Funds for Operating Expenses of Two-Year Colleges

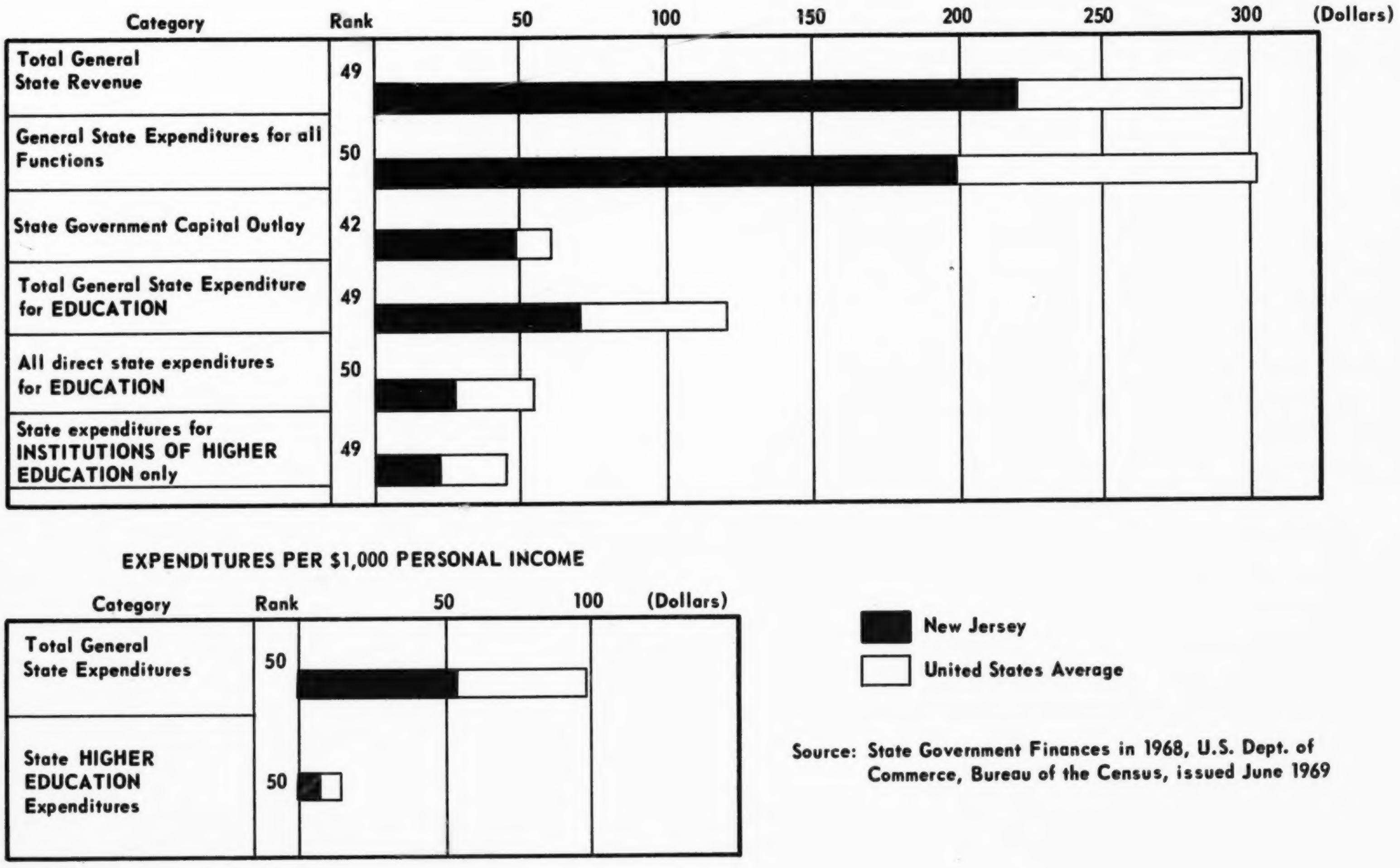
States	Per Capita Approp.	Rank
Alabama	$1.89	15
Arizona	4.07	5
Arkansas	0.44	24
California	5.01	3
Colorado	2.85	8
Florida	8.67	2
Georgia	0.19	28
Idaho	0.29	25
Illinois	2.05	13
Iowa	2.18	12
Kansas	1.01	19
Maryland	1.39	17
Michigan	2.81	9
Mississippi	2.64	10
Missouri	1.58	16
Nebraska	0.48	23
New Jersey	1.08	18
New Mexico	0.23	27
New York	1.90	14
North Carolina	4.76	4
North Dakota	0.92	20
Ohio	0.63	22
Oklahoma	0.03	29
Oregon	3.94	6
Pennsylvania	0.75	21
Texas	2.41	11
Washington	9.99	1
Wisconsin	0.29	26
Wyoming	3.51	7
U.S. Average	2.37	

SOURCE: M.M. Chambers, Record of Progress: Ten Years of State Tax Support of Higher Education 1959-60 Through 1968-69. No.1096

---

[5] Full-time students at private institutions during the year of 1968: Massachusetts, 246 (per million population); New Jersey, 38 (per million population); New York, 119 (per million population); and Pennsylvania, 79 (per million population).

FIGURE 9
PER CAPITA EXPENDITURES OF SELECTED FINANCIAL ITEMS



Source: State Government Finances in 1968, U.S. Dept. of Commerce, Bureau of the Census, issued June 1969

In spite of these low rankings in per capita and total state appropriations for higher education, higher education plays an important role in New Jersey's budget. In 1968, New Jersey spent 10 percent of its state budget on higher education, while 30 percent was devoted to all educational efforts (i.e., including primary and secondary education). Comparative figures for surrounding states show similar allocations for primary and secondary education and for higher education.[6]

New Jersey must face many other public needs in addition to higher education. It would not seem reasonable to expect the state to increase the share of annual appropriations allocated to higher education at the expense of other essential activities supported by the state. More adequate public support of higher education must come through an increase in total revenue and appropriations rather than through a reallocation of existing appropriations.

New Jersey has the capacity to provide these additional resources. As indicated in Fig. 9, New Jersey ranks fifth in terms of the per capita personal income of its residents. *New*

---

[6] "State Government Finances in 1968," U.S. Department of Commerce, Bureau of the Census, June, 1969.

Jersey state expenditures for higher education are approximately $6.48 per $1,000 of personal income, compared to a national average of $14.45 per $1,000 of personal income. Thus New Jersey ranks 50th in per capita state government expenditure for higher education relative to personal income. In other words, the typical American taxpayer pays more than twice as much for every $1,000 of income to support higher education as does the typical New Jersey taxpayer. Figures for selected other states appear in the table below.

State Expenditures for Higher Education in 1968 per $1,000 Personal Income

National average	$14.45
California	12.31
Connecticut	7.68
New York	7.42
Pennsylvania	7.26
Massachusetts	6.83
New Jersey	6.48

Source: "State Government Finances in 1968," Bureau of the Census, U.S. Department of Commerce, June, 1969.

A research study recently released by the Southern Regional Education Board attempts to demonstrate the extent to which opportunities exist for raising additional state and local tax revenues in each of the states. This study analyzed the tax capacity of each state by the level of personal income and then measured the tax effort being made by state and local entities in terms of the relative amounts of personal income which is contributed to state and local governments. In developing interstate comparisons, the study assumed that the average effort made in the nation to collect a tax is reasonable, and that any state should be able to make such a reasonable effort if it chooses to do so. This study found that, at present, New Jersey is foregoing an estimated $670 million annually by not fully utilizing its tax potential.

In summary, New Jersey has the financial capacity to provide greatly increased support for higher education. This is significant, for it means that the task of building an adequate system of higher education for New Jersey residents is feasible; the needed financial obligations are large but not overwhelming.

Chapter IV

THE NEW JERSEY SYSTEM OF HIGHER EDUCATION

INTRODUCTION

This chapter describes the New Jersey system of higher education. The first section describes the present structure and system of governance. (The appendix contains a description of each institution within the system.) In the second section, data on the status of the system as of 1968 are analyzed by programs, institutions, and levels of instruction. The third section contains data on current enrollments and enrollment projections. In the fourth section, financial aid available to New Jersey students is analyzed and related to the needs of the state's students. The concluding sections deal with the library and computer resources of the system and with cooperative efforts among the New Jersey institutions of higher education.

Chapter IV A

STRUCTURE AND GOVERNANCE

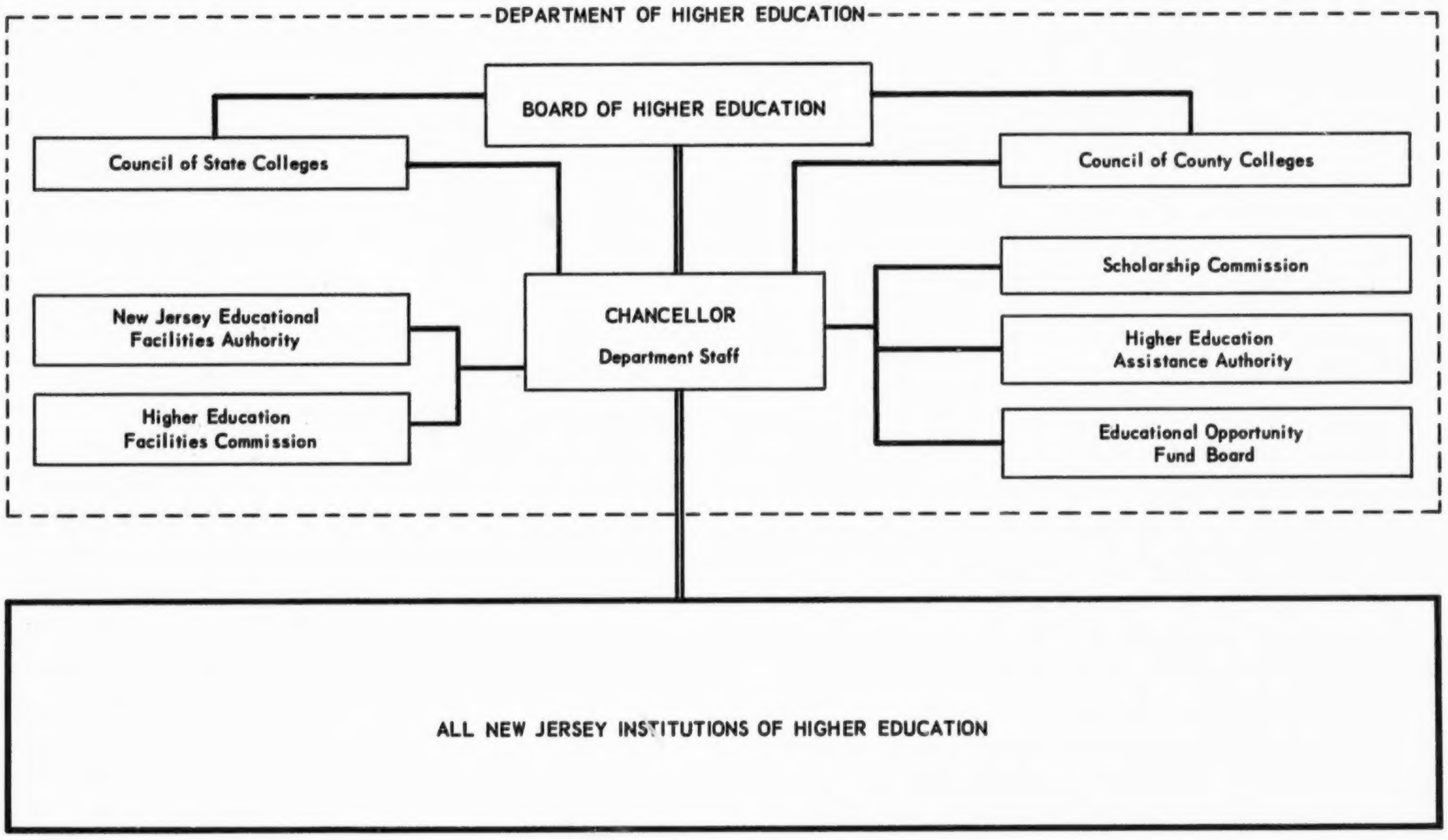
This section describes the present structure of the system of higher education in New Jersey.

In the New Jersey system, great emphasis is placed on the self-governance of each institution within the general leadership of the Board of Higher Education. The Board of Trustees of each institution provides direction for the institution and sets institutional policies. The public institutions operate within the general policy framework set by the Board of Higher Education. The Board is also concerned that the good health of the independent institutions is maintained.

The Department of Higher Education is a principal department of the state government, responsible to the Governor and the Legislature. The Department consists of the Board of Higher Education, the Chancellor and his staff, and the following divisions and branches: the Educational Opportunity Fund; the Higher Education Assistance Authority; the Higher Education Facilities Commission; the New Jersey Educational Facilities Authority; and the Scholarship Commission (see Fig. 10). In addition, the Chancellor and the Board appoint advisory committees and other ad hoc groups as needed to carry out the functions conferred upon the Department. The Department is advised by the Council of State Colleges and the Council of County Colleges on matters relating to state college and county college affairs. The Department also acts with the cognizance of the Association of Independent Colleges and Universities in New Jersey, the New Jersey Association of Colleges and Universities, and the New Jersey Junior and Community College Association.

FIGURE 10

THE NEW JERSEY SYSTEM OF HIGHER EDUCATION


DEPARTMENT OF HIGHER EDUCATION
BOARD OF HIGHER EDUCATION
Council of State Colleges
Council of County Colleges
Scholarship Commission
New Jersey Educational Facilities Authority
CHANCELLOR
Department Staff
Higher Education Assistance Authority
Higher Education Facilities Commission
Educational Opportunity Fund Board
ALL NEW JERSEY INSTITUTIONS OF HIGHER EDUCATION

STRUCTURE OF THE SYSTEM

BOARD OF HIGHER EDUCATION

The Board of Higher Education was created by the Higher Education Act of 1966. It consists of seventeen members. Nine of these are citizen members, appointed by the Governor with the advice and consent of the Senate. Six members are representatives of higher education institutions of the state. These are the chairman of the Board of Governors at Rutgers, the chairman of the Board of Trustees of Newark College of Engineering, the chairman of the Council of State Colleges, the chairman of the Council of County Colleges, the president of the State Board of Education, and the representative of the Association of Independent Colleges and Universities in New Jersey. In addition, the Chancellor and the State Commissioner of Education are nonvoting exofficio members.

The Board of Higher Education has broad powers and responsibilities for the general supervision of higher education in New Jersey. As set forth in the Higher Education Act of 1966, these are to:

— "ADVANCE LONG RANGE PLANNING FOR THE SYSTEM OF HIGHER EDUCATION AS A WHOLE IN THE STATE."

The Board has the responsibility to conduct research on higher education needs; develop and maintain a comprehensive master plan, establish new colleges, schools, units, divisions, institutes, departments, branches, or campuses as required by the master plan; and keep the Governor, the Legislature, and the public informed of the needs and accomplishments of public higher education in New Jersey.

— *"ESTABLISH GENERAL POLICY FOR THE GOVERNANCE OF THE SEPARATE INSTITUTIONS."*

The specific responsibilities of the Board relating to all public institutions of higher education include establishing minimum admission standards and minimum standards for granting degrees, approving new programs and degrees, and approving discontinuance of degrees and educational programs; reviewing periodically existing programs of instruction, research, and public service and advising public institutions of desirable change; setting policy on salary and fringe benefits and establishing general personnel policies; and determining tuition rates and other fees to be paid by students at the state colleges.

— *"COORDINATE THE ACTIVITIES OF THE INDIVIDUAL INSTITUTIONS WHICH, TAKEN TOGETHER, MAKE UP THE SYSTEM OF HIGHER EDUCATION IN NEW JERSEY."*

The Board also has the duty to encourage harmonious and cooperative relationships among all public and private institutions of higher education and to assure that their efforts, taken together, will best meet the goals and obligations of the New Jersey system of higher education. Such coordination has many specific purposes, including assuring that resources are used most effectively, that programs and facilities are not duplicated unnecessarily, and that the wide variety of programs required by the citizens of the state can be provided.

— *"MAINTAIN GENERAL FINANCIAL OVERSIGHT OF THE STATE SYSTEM OF HIGHER EDUCATION."*

The law gives the Board responsibility to receive all budget requests from the public institutions, coordinate and balance such requests, and submit a combined request for appropriations annually to the Governor; to be an agency of communication with the federal government and receive and recommend the disbursement of federal funds; and to exercise visitorial general powers of supervision and control over such institutions of higher education as may be utilized by the state.

— *"LICENSE INDEPENDENT INSTITUTIONS OF HIGHER EDUCATION" AND "APPROVE THE BASIS AND CONDITIONS FOR CONFERRING DEGREES."*

The Board of Higher Education has the responsibility of licensing independent institutions of higher education under such rules and regulations as it may prescribe. In addition, for those institutions established since April 1, 1887, it must approve the basis or conditions for the conferral of degrees. For those institutions which do not have either regional or professional accreditation, the Board assumes the task of demanding minimal fulfillment of those standards commonly associated by the academic community with the conferral of degrees. With institutions which are regionally and/or professionally accredited, the Board of Higher Education shares with the institution and the accrediting association the responsibility of maintaining and enhancing the quality of higher education.

THE CHANCELLOR

The Chancellor is the chief executive and administrator of the Department of Higher Education. He is appointed for a term of five years by the Board of Higher Education with the approval of the Governor. The Chancellor and his staff assist the Board of Higher Education in carrying out its responsibilities, including developing and maintaining a comprehensive master plan for higher education in New Jersey, establishing new colleges or other academic units as required by the master plan, establishing general policy for the governance of the separate institutions, coordinating the activities of individual institutions, maintaining general financial oversight over the state system of higher education, and licensing and approving the basis and conditions for conferring degrees for programs of independent institutions within the state. Subject to the approval of the Board, the Chancellor and his staff enforce all rules and regulations prescribed by the Board.

In addition, the Chancellor's office is charged by law with the coordination of state and federal activities relating to higher education and with the provision of advice to the Governor on affairs and problems of higher education including recommendations for proposed legislation. The office also encourages cooperation among institutions, stimulates programs related to higher education, maintains an inventory of data and information, and acts as a clearing house and agency for information on state and federal services and programs.

COUNCIL OF STATE COLLEGES

The Council of State Colleges consists of the presidents and the chairmen of the Boards of Trustees of the several state colleges. The Chancellor is a nonvoting exofficio member.

The Council acts as an advisory body to the Board of Higher Education with regard to the state colleges. The Council fosters communication and cooperation among the state colleges, guides and stimulates effective planning and program development within the general policies and guidelines set by the Board of Higher Education, ensures diversity of development among the several state colleges in ways which will be responsive to particular needs in different parts of the state, and seeks to ensure acceptable and effective lines of development in admissions policy, academic standards, programs, financing, and community relations.

COUNCIL OF COUNTY COLLEGES

The Council of County Colleges consists of the chairmen of the Boards of Trustees and the presidents of the several county colleges. The Chancellor is a nonvoting exofficio member of the Council.

The Council acts as an advisory body to the Board of Higher Education with regard to the county community colleges. It serves as a means of communication between the colleges and, under the guidance of the Board of Higher Education, seeks to ensure acceptable and effective lines of development in admissions policy, academic standards, programs, financing, and community relations in the several community colleges. Staff members from the Department of Higher Education serve the Council and the colleges as a resource for assistance in planning and by providing technical assistance and information.

NEW JERSEY ASSOCIATION OF COLLEGES AND UNIVERSITIES

The New Jersey Association of Colleges and Universities was founded in 1944 to further the cause of higher education in New Jersey by fostering cooperation and exchange of ideas among New Jersey institutions of higher education. The Association seeks to cooperate with similar educational organizations outside the state in advancing education both nationally and internationally.

Membership in the New Jersey Association of Colleges and Universities (NJACU) is open to any institution of higher education within the state of New Jersey which accepts the aims of the organization and which is approved by the New Jersey State Board of Higher Education. Membership in the Association presently includes forty-four colleges and universities. These institutions enroll more than 98 percent of the students who are presently pursuing higher education in New Jersey.

Officers of the Association are elected at the annual meeting held each spring. The NJACU is governed by a Board of Directors which is composed of the Association's officers and four other representatives elected by the Association. The Association is consulted by the Board of Higher Education.

THE ASSOCIATION OF INDEPENDENT COLLEGES AND UNIVERSITIES IN NEW JERSEY

The Association of Independent Colleges and Universities in New Jersey was organized in 1966 for the purpose of "advancing higher education in New Jersey by studying, devising, and promulgating programs for the maximization of the contribution of independent colleges and universities, by fostering public interest in public policy and legislation respecting independent colleges and universities, by disseminating information relevant to this purpose to its membership."

Membership is open to all colleges and universities in New Jersey operated under private control which are accredited by the Middle States Association of Colleges and Secondary Schools, except that an institution whose primary purpose is religious training is not eligible.

The membership presently includes fifteen colleges and universities: Bloomfield College, Caldwell College, Centenary College, the College of Saint Elizabeth, Drew University, Fairleigh Dickinson University, Georgian Court College, Monmouth College, Princeton University, Rider College, Saint Peter's College, Seton Hall University, Stevens Institute of Technology, Union College, and Upsala College.

The affairs of the Association are managed by an Executive Board which meets monthly. The Association consults with the Board of Higher Education on matters relating to independent institutions.

THE NEW JERSEY JUNIOR AND COMMUNITY COLLEGE ASSOCIATION

The New Jersey Junior and Community College Association (NJJCCA) is an organization whose primary purpose is to foster communication between the twenty-five private and public two-year institutions in the state. Other purposes, as spelled out in the bylaws of the Association include articulation between the two-year colleges and the secondary schools and senior colleges of the state, and attention to problems, issues, and current legislation which affect the two-year colleges.

The Association held its constitutional convention in April 1939. It is presently governed by an executive committee consisting of president, vice-president, secretary-treasurer, and six additional members. Officers and Board members are elected at the annual meeting. It is their responsibility to arrange for the annual meeting and to carry on the business of the Association. Officers hold office for one year; Board members for three years.

Membership is both individual and institutional. Any educator or person residing in New Jersey and in sympathy with the aims of the Association is eligible for individual membership. Any state-approved two-year college is eligible for institutional membership.

STATE SCHOLARSHIP COMMISSION

The State Scholarship Commission was established in 1959. It consists of the Chancellor, who serves as chairman, and eight other members appointed by the Governor, of whom one represents Rutgers, one the state colleges, three the independent institutions of higher education, and three citizens of the state.

The State Scholarship Commission is responsible for establishing rules and regulations and overseeing the administration of four programs of awards: the Basic State Scholarship Program, the Incentive Grant Program, the Tuition Aid Grant Program, and the County College Awards Program.

The Basic Scholarship program provides awards based on scholarship and need of up to $500 to 5 percent of the state's high school graduates. In 1968-1969, approximately 14,500 students received State Scholarships to attend over 650 colleges located in all 50 states.

The Incentive Grant Program provides supplementary assistance of up to $500 to State Scholarship holders attending New Jersey colleges where tuition and fees exceed $500. In 1968-1969, some 2,700 students received aid through this program.

The Tuition Aid Grant Program was enacted in February 1969. It provides assistance to students attending colleges in New Jersey where the tuition exceeds $450 a year. The amount of the grant is based on the income and assets of the applicant and his parents and the college tuition charge. The maximum grant is $1,000 a year. Nearly 3,000 students will receive these grants during 1969-1970.

The most recent of the state's award programs, enacted in June 1969, is that for county college graduates. This program provides $250,000 for New Jersey county college graduates transferring to four-year institutions who need assistance in order to meet their college expenses. Awards will range from $500 to $1,000 and may not exceed the college tuition charge.

Further discussion of state scholarship programs appears in Chapter IV D, Student Aid.

EDUCATIONAL OPPORTUNITY FUND BOARD

The Educational Opportunity Fund Board was created in 1968. It consists of the Chancellor, who serves as chairman, and eight citizen members appointed by the Board of Higher Education with the approval of the Governor.

The Board is responsible for the administration of the New Jersey Educational Opportunity Fund, which identifies potential college students from needy New Jersey families, recruits them, supports programs of remedial education for them, and provides required financial assistance. During 1968-1969, over 1,600 students attended college under this program. The budget for 1968-1969 included appropriations for $2 million. Appropriations for 1969-1970 are $4 million.

HIGHER EDUCATION ASSISTANCE AUTHORITY

The Higher Education Assistance Authority was established in 1959. It consists of the Chancellor and four additional members appointed by the Governor with the advice and consent of the Senate. No more than two of the appointed commissioners shall be members of the same political party.

The Authority is a corporate body. Its purpose is to assist New Jersey residents to obtain loans from participating lending institutions to help meet their expenses for higher education and to guarantee such loans. Assistance is also provided to help meet expenses of attending certain non-degree-granting educational institutions. In addition, interest on such loans is reduced for many borrowers because of an interest subsidy provided by the Federal government.

More than 34,000 loans, valued at $35 million, were guaranteed during the year 1968-1969. This means that one out of every five New Jersey residents who attended college, in this state or elsewhere, was assisted under this program.

NEW JERSEY STATE COMMISSION FOR THE HIGHER EDUCATION FACILITIES ACT OF 1963

The New Jersey State Commission for the Higher Education Facilities Act of 1963 administers Title I of the U.S. Higher Education Facilities Act of 1963 and Title VI of the U.S. Higher Education Act of 1965. The Commission was established by executive order of the Governor and at present is composed of seven members representing the higher education community in New Jersey. The Chancellor of Higher Education chairs the Commission.

Title I (P.L. 88-204) provides grants for public community colleges, public technical institutes, and other public and private institutions of higher education for construction of academic facilities. Institutions of higher education submit applications to the State Commission which reviews the applications, establishes priorities (in accordance with the State Commission Facilities Plan), and recommends proposed grant awards to the U.S. Commissioner of Education. After federal approval, grant awards are made to the institutions by the U.S. Commissioner.

Title I also provides Comprehensive Facilities Planning Grants to State Facilities Commissions for state-wide facilities planning activities. The New Jersey State Commission for the Higher Education Facilities Act of 1963 has received a number of grants for studies for statewide facilities planning and other special projects.

Title VI (P.L. 89-329) provides grants to institutions of higher education for the purchase of laboratory, television, and other special equipment and materials to improve the quality of classroom instruction in certain subject areas. Institutions of higher education submit applications to the State Commission. These applications are approved through the same procedure that applies to Title I grants.

NEW JERSEY EDUCATIONAL FACILITIES AUTHORITY

The New Jersey Educational Facilities Authority was created by the Legislature in 1966. The Authority is composed of seven members appointed by the Governor including two exofficio members, the State Treasurer and the Chancellor of Higher Education. The Authority has an executive officer who manages its affairs. It also retains the services of financial advisors and legal advisors.

Under the law, the Authority is an independent and autonomous service agency established to assist New Jersey institutions of higher education in the construction of academic and residential facilities. This assistance is provided through the selling of Authority bonds which are tax exempt. These bonds are obligations of the Authority. They are not guaranteed by the state of New Jersey.

For both the public and private institutions, the Authority may provide assistance in the construction of revenue-producing facilities including residence halls, cafeterias, student unions, and parking facilities. In addition, private institutions are eligible for Authority participation in the construction of academic buildings, libraries, laboratories, and similar academic units.

The Authority is expressly precluded from participating in the construction of facilities to be used for sectarian instruction or as places of religious worship.

BOARDS OF TRUSTEES

Each college and university in New Jersey is governed by a Board of Trustees. These Boards are responsible for providing leadership and shaping policy for their institutions.

At independent institutions, trustees are usually elected by the Board itself and alumni of the institution.

Rutgers, The State University has both a Board of Trustees and a Board of Governors. Alumni members of the Board of Trustees are elected by the Board itself on the nomination of the University's several alumni and alumnae organizations. Public members are appointed by the Governor with the advice and consent of the Senate. The Board of Governors provides immediate oversight over the operations of the University. Membership consists of two exofficio members, the Chancellor of Higher Education and the president of the university, who serve without vote, in addition to eleven voting members. Five of these are elected by the Board of Trustees from its own membership, and six are appointed by the Governor with the advice and consent of the Senate.

The trustees of the state colleges are appointed by the Board of Higher Education with the approval of the Governor. These Boards of Trustees were established under the authority of the Higher Education Act of 1966. Trustees of Newark College of Engineering and the New Jersey College of Medicine and Dentistry are appointed by the Governor with the advice and consent of the Senate for those of NJCMD. Trustees of the public county colleges are appointed by the Board of Chosen Freeholders for the county. The County Superintendent of Schools serves as an exofficio member of each county college Board of Trustees. The members of the State Board of Higher Education and all trustees of New Jersey public institutions of higher education serve on a voluntary basis.

FIGURE 11
INSTITUTIONS OF HIGHER EDUCATION IN NEW JERSEY

INSTITUTION	LOCATION	SEX	LEVEL
Alma White College	Zarephath	Coed	four year
Alphonsus College	Woodcliff Lake	Women	two year
Assumption College for Sisters	Mendham	Women	two year
Atlantic Community College*	Mays Landing	Coed	two year
Bergen Community College*	Paramus	Coed	two year
Bloomfield College	Bloomfield	Coed	four year
Brookdale Community College*	Lincroft	Coed	two year
Burlington County College*	Pemberton	Coed	two year
Caldwell College for Women	Caldwell	Women	four year
Camden County College*	Blackwood	Coed	two year
Centenary College for Women	Hackettstown	Women	two year
College of Saint Elizabeth	Convent Station	Women	four year
Cumberland County College*	Vineland	Coed	two year
Don Bosco College	Newton	Men	four year
Drew University	Madison	Coed	university
Englewood Cliffs College	Englewood Cliffs	Coed	two year
Essex County College*	Newark	Coed	two year
Fairleigh Dickinson University	Teaneck, Rutherford, Madison	Coed	university
Felician College	Lodi	Women	four year
Georgian Court College	Lakewood	Women	four year
Glassboro State College*	Glassboro	Coed	four year
Gloucester County College*	Sewell	Coed	two year
Immaculate Conception Seminary	Ramsey	Men	theological seminary
Institute for Advanced Study	Princeton	Coed	post-graduate
Jersey City State College*	Jersey City	Coed	four year
Luther College of the Bible and Liberal Arts	Teaneck	Coed	two year
Mercer County Community College*	Trenton	Coed	two year
Middlesex County College*	Edison	Coed	two year
Monmouth College	West Long Branch	Coed	four year
Montclair State College*	Upper Montclair	Coed	four year
County College of Morris*	Dover	Coed	two year
Mount Saint Mary College	North Plainfield	Women	two year
Newark College of Engineering*	Newark	Coed	university
Newark State College*	Union	Coed	four year
New Brunswick Theological Seminary	New Brunswick	Coed	theological seminary
New Jersey College of Medicine and Dentistry*	Newark	Coed	university
Northeastern Collegiate Bible Institute	Essex Fells	Coed	four year
Ocean County College*	Toms River	Coed	two year
Paterson State College*	Wayne	Coed	four year
Princeton Theological Seminary	Princeton	Coed	theological seminary
Princeton University	Princeton	Coed	university
Rider College	Trenton	Coed	four year
Rutgers, the State University*	New Brunswick, Newark, Camden	Coed	university
Saint Joseph's College	Princeton	Men	two year
Saint Michael's Monastery	Union City	Men	theological seminary
Saint Peter's College	Jersey City	Coed	four year
Salesian College	North Haledon	Women	two year
Seton Hall University	South Orange	Coed	university
Shelton College	Cape May	Coed	four year
Somerset County College*	Green Brook	Coed	two year
Stevens Institute of Technology	Hoboken	Men (undergraduate) Coed (graduate)	four year
Tombrock College	West Paterson	Men	two year
Trenton State College*	Trenton	Coed	four year
Union College	Cranford	Coed	two year
Upsala College	East Orange	Coed	four year
Villa Walsh College	Morristown	Women	two year
Westminster Choir College	Princeton	Coed	four year

* Public Institution

Chapter IV B

PROGRAMS — 1968-1969 DEGREES AND ENROLLMENTS

SUMMARY — ASSOCIATE, BACCALAUREATE, MASTER'S AND DOCTORAL PROGRAMS

This section attempts to give a comprehensive picture of the system of higher education in New Jersey by program. A program has been defined to include major fields or curricula. Included are data on degrees conferred and on enrollments for both full-time and part-time students.[1] Wherever possible, data from national sources have been cited to provide a comparison with New Jersey statistics.

The data are analyzed from several points of view. Each level of higher education — associate programs, bachelor programs, and masters and doctoral programs — is discussed separately.

Within each section the programs are compared in terms of degrees conferred during the year ending June 1969 and opening fall enrollments for 1968. In each case, there is further analysis in terms of attendance status (full-time or part-time) and control (public or independent) of the institution.

---

[1] Higher Education General Information Survey for 1968 and 1969; New Jersey Department of Higher Education 1968 Undergraduate Enrollment Survey; and New Jersey Department of Higher Education 1968-1969 Part Time Education Survey.

1. ASSOCIATE PROGRAMS

INTRODUCTION

Nine higher education institutions in New Jersey offered two year programs of study before 1960. Seven institutions were founded as religious colleges and two of these functioned originally as teacher training schools. Two independent institutions began as two year schools offering general programs of study. All colleges have developed into liberal arts colleges granting associate degrees in arts, sciences, and some career areas.

During the 1960's sixteen new two-year colleges were founded. Thirteen of these were new county colleges established as a result of state legislation in 1962. Three of these, Englewood Cliffs College, Alphonsus College and Edward Williams College, are private two-year colleges which have been founded during the 1960's.

Two institutions offering two-year programs are affiliated with four-year colleges. Brookdale College is affiliated with Monmouth College, and Edward Williams College is affiliated with Fairleigh Dickinson University. The rest of the two-year institutions support separate faculty, facilities, and programs.

DEGREES AWARDED

Associate degrees are awarded to students who have completed two years of study in a state approved institution of higher education. Associate degrees which are conferred in general liberal arts programs of study are Associate in Arts and Associate in Science degrees. Most students completing programs in general liberal arts fields intend to transfer to four-year institutions to complete work for a baccalaureate degree after receiving the associate degree. Associate degrees which are conferred in career programs are usually designated Associate in Applied Science degrees. Students in career programs learn specific skills which will enable them to obtain employment in a particular field upon graduation in addition to receiving a basic liberal arts background at a post secondary level. Some students in career programs intend to transfer to four-year institutions to complete work in a baccalaureate program. Others enter directly into employment upon completion of the work for an associate degree.

With the exception of eight independent colleges,[2] all two-year institutions offer career and liberal arts programs. About one-half of the total associate degrees granted in 1969 were conferred in career fields. The remainder were degrees in liberal arts programs. Within the career fields, most degrees were conferred in fields related to business and commerce (502), nursing (170), engineering (135) and general teaching (182). The remaining career degrees were granted in fields as varied as computer and data processing (14) and religion (63).

In the liberal arts field, associate degrees are usually granted without designation by major field. Most of the degrees granted in general liberal arts fields in 1969 were designated only as broad general or as transfer programs (1659).[3]

PROGRAM ENROLLMENT, FULL-TIME

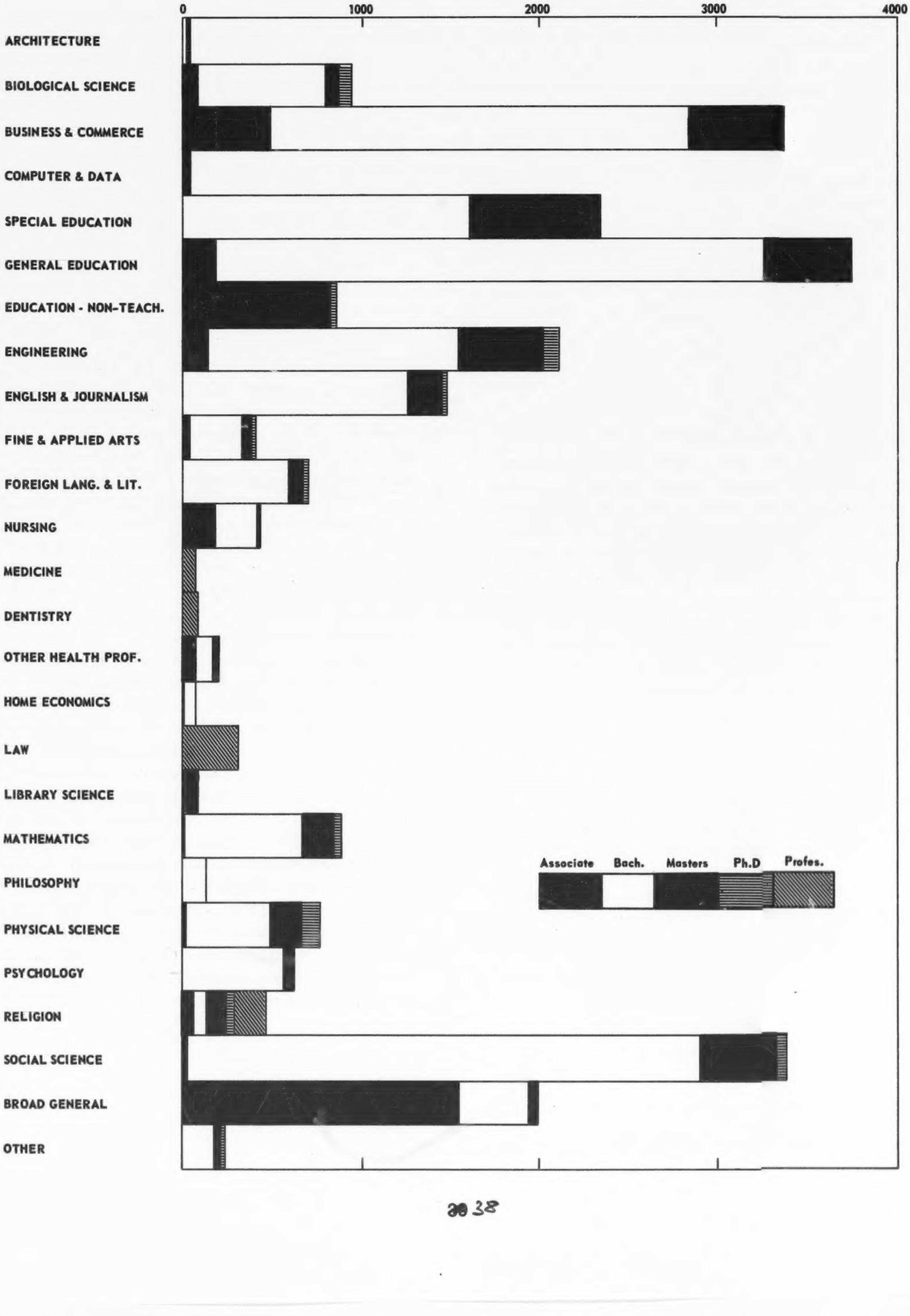
Approximately 56 percent of all full-time students enrolled in associate degree programs were enrolled in career programs in 1968. The greatest proportion of full-time enrollment was in curricula related to business and commerce (25 percent), engineering (8 percent) and health services (9 percent).[4] (See Figure 13 and Appendix C)

[2] Assumption, Salesian, Tombrock, Mount St. Mary, Luther College, Villa Walsh, St. Joseph's and Union

[3] HEGIS forms, 1969

[4] State Department of Higher Education, Undergraduate Enrollment Survey, 1968.

FIGURE 12
DEGREES GRANTED BY PROGRAM, 1969



At the two year public colleges, the enrollment in career programs for full-time students was 67 percent. Differences from total enrollment occurred in the career fields of business and commerce (30 percent) and engineering (11 percent).

At two-year independent colleges, percentages for career (29 percent) and transfer programs (71 percent) for full-time students differed from that of all full-time students. Business and commerce related curricula (15 percent) continued to be the major field of career related enrollment, however, health services, including nursing continued to constitute a major proportion of the career enrollment (9 percent).

PROGRAM ENROLLMENT, PART-TIME

For all part-time students in associate programs 74 percent were enrolled in broad general curricula, which is generally considered transfer. For the career oriented programs, *business and commerce continued* to attract the most enrollment (15 percent).[5] (See Appendix C)

At the two-year public colleges, an even greater percentage of part-time students were enrolled in transfer oriented curricula (88 percent). Although business and commerce related curricula for these students was 3 percent it still constitutes the largest group of career oriented program enrollment.

For the part-time students at two-year independent colleges, career related curricula and programs had an enrollment of 64 percent. For these colleges, business and commerce again constituted the major enrollment (47 percent) with health services also contributing a significant enrollment group (8 percent).

2. BACHELOR'S PROGRAMS

INTRODUCTION

Higher Education at the undergraduate level began in the eighteenth century in New Jersey with the founding of the College of New Jersey (now Princeton University) and of Queens College (now Rutgers, The State University). State and private normal schools and private religious colleges of liberal arts developed in the late 1800's and early 1900's. There are now 26 institutions which offer the baccalaureate degree including 8 public institutions and 18 independent institutions.

DEGREES AWARDED

A baccalaureate degree is awarded to students who have completed four years or sometimes five years post-secondary study in liberal arts and sciences usually with emphasis on a particular field. The major field of study for each student is designated as the program in which his degree is conferred. Degrees granted in programs which prepare a student for a particular occupation are described as degrees granted in professional fields. They are distinguished from degrees granted in liberal arts fields. In each case the degree received is a baccalaureate degree. For the purposes of the Higher Education General Information Survey (HEGIS) first-professional degrees are defined as those in selected professional fields which require at least six years to complete.

In 1968, 17,034 baccalaureate degrees were granted by New Jersey institutions. This was 2.7 percent of the baccalaureate degrees granted nationally.[6] The baccalaureate degrees conferred in New Jersey in 1969 were about evenly split between various professional fields and liberal arts. Of the baccalaureate degrees in professional fields, education (4,710) and business and commerce (2,341) accounted for the majority of degrees. Other professional fields, such as engineering (1,422) and nursing (249) were also represented.

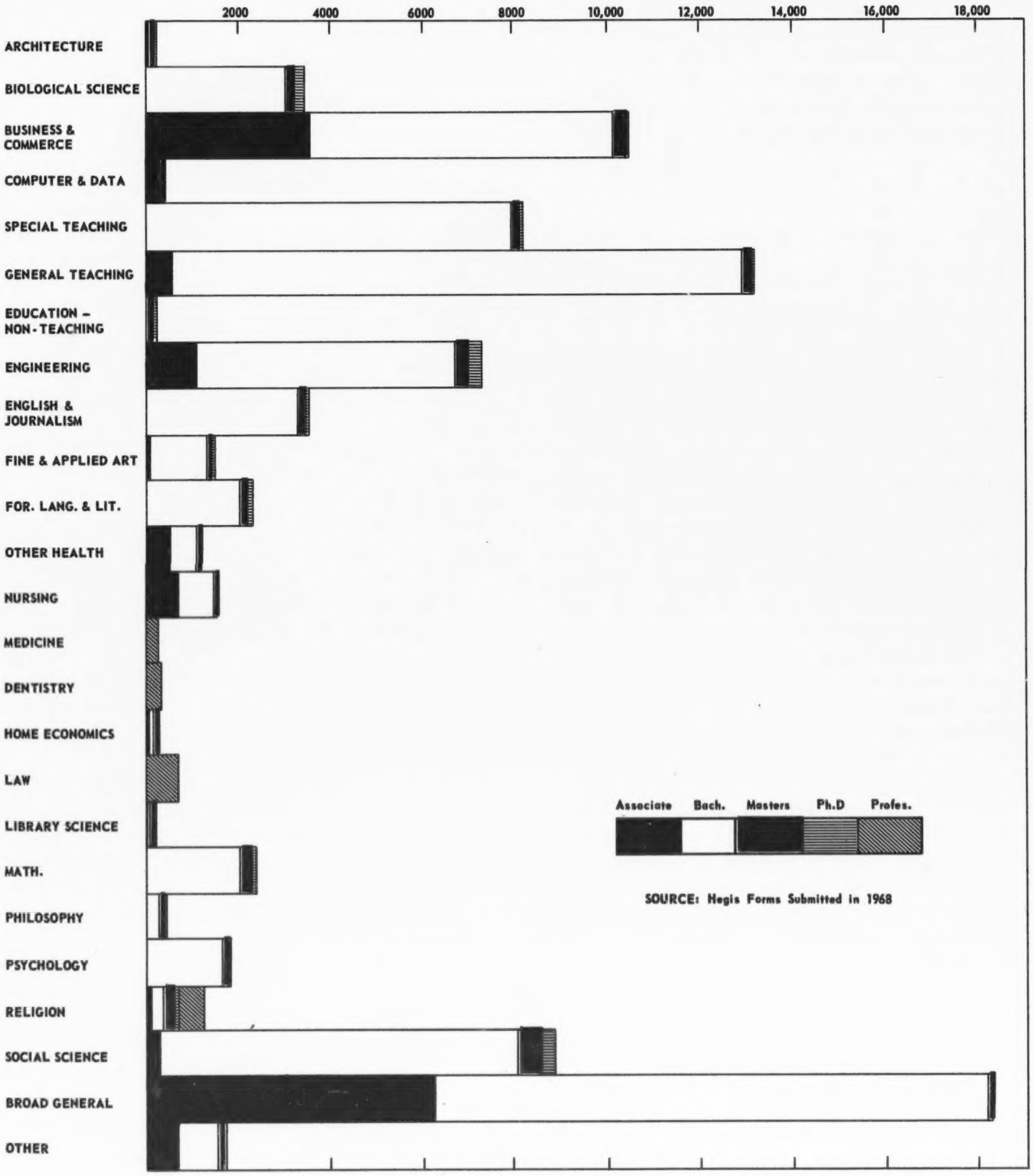
---

[5] State Department of Higher Education Survey of Part-Time Education, 1968.

[6] Earned Degrees Conferred, Summary Data, OE-54013-68-A

FIGURE 13

SUMMARY – FULL TIME ENROLLMENT BY PROGRAM, AND LEVEL 1968-1969



SOURCE: Hegis Forms Submitted in 1968

TOTAL ENROLLMENT

Within the state, in 1968-69, 48,093 students were enrolled on a part-time basis and 80,077 on a full-time basis in baccalaureate level courses. New Jersey institutions enrolled 2.2 percent of the total national enrollment for baccalaureate courses compared to the state's 3.5 percent of the nation's population.[7] Of the students enrolled in such courses, approximately 75 percent of full-time and 70 percent of part-time students were candidates for the baccalaureate degree.

FULL-TIME ENROLLMENT

Greatest enrollment at the baccalaureate level of full-time students in professional fields was in fields of education (28 percent) and business and commerce (10 percent). Baccalaureate programs in the liberal arts showed the greatest enrollment in social sciences where 11 percent of all full-time students were enrolled. Other fields which were represented in significant numbers included English and Journalism (5 percent), Foreign Languages and Literature (3 percent), and Engineering (8 percent).

Few differences exist in the program enrollment of full-time students between public and independent colleges. The greatest difference was in education and in business and commerce. Public colleges enrolled 39 percent of their full-time students in education and 1 percent of their full-time students in business and commerce programs. Private colleges enrolled 20 percent of their full-time students in business and commerce programs, and 14 percent of their full-time students in educational programs.[8]

PART-TIME ENROLLMENT

Part-time Programs drawing the greatest proportion of part-time enrollment were education (27 percent), business and commerce (24 percent) and engineering (6 percent). These patterns are similar to patterns for full-time enrollment.

Public colleges drew more part-time enrollment in education, enrolling 39 percent of their students in this field. Private colleges drew most enrollment in business and commerce and engineering, enrolling 35 percent and 8 percent of their part-time students respectively in these fields.[9]

---

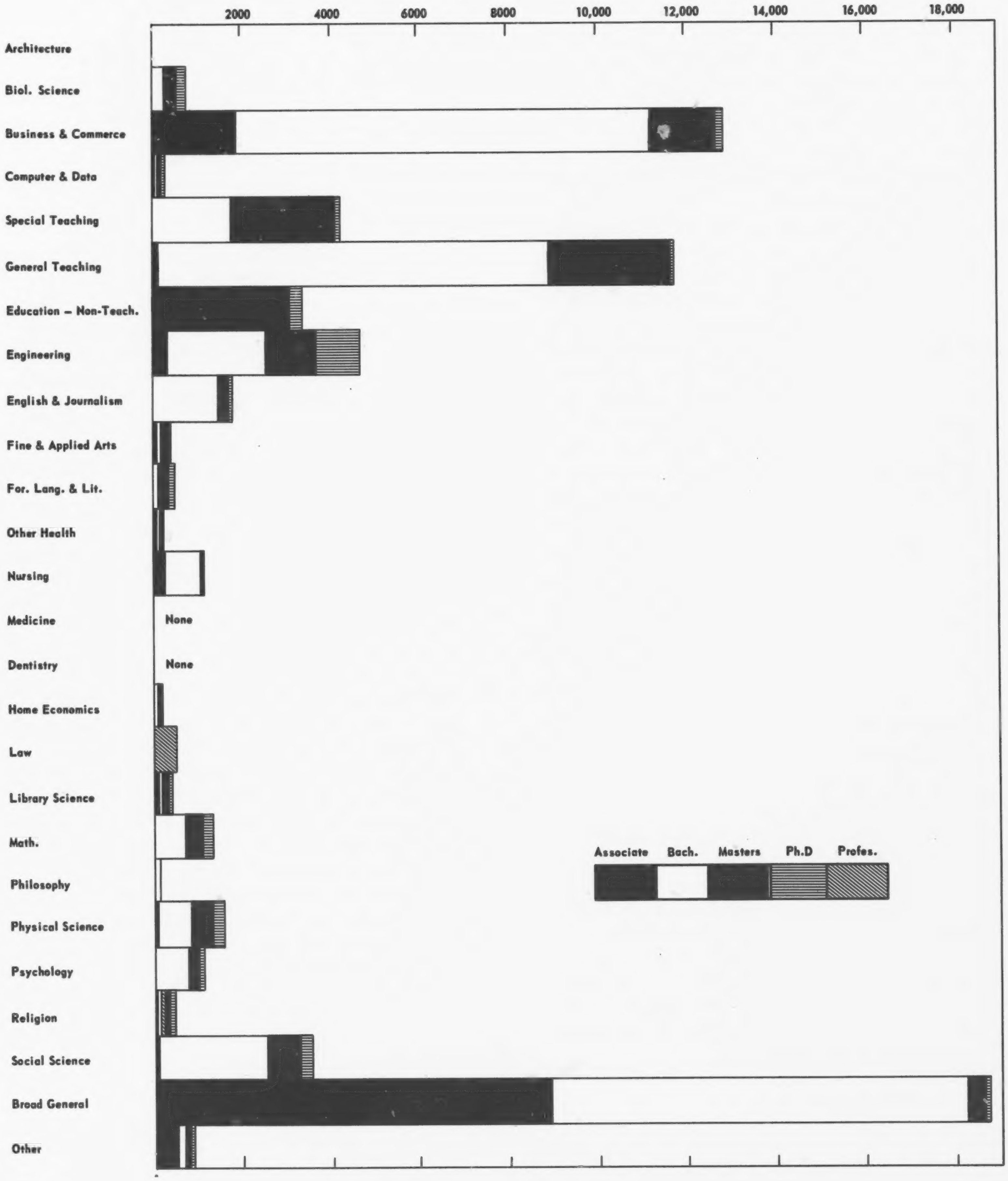
[7] Earned Degrees Conferred, Summary Data, OE-54013-68-A

[8] HEGIS "Opening Fall Enrollment in Higher Education," forms for 1968.

[9] State Department of Higher Education, Survey of Part-Time Enrollment, 1968.

FIGURE 14

SUMMARY – PART TIME ENROLLMENT BY PROGRAM AND LEVEL 1968



3. MASTER'S AND DOCTORAL PROGRAMS

INTRODUCTION

Graduate education originated in New Jersey in 1877 when Princeton University, then the College of New Jersey, organized its graduate department. In 1923 Rutgers established its first school for graduate work. Stevens Institute of Technology, Newark College of Engineering (NCE), and Drew University developed graduate programs during the first half of the century. Seton Hall College was reorganized into a University in 1950.

During the decade of the fifties, additional graduate and professional schools were founded by Fairleigh Dickinson University, Seton Hall University, and Rutgers. Rider College and the six state colleges developed master's level programs in education fields during the 1950's. Since 1960 Monmouth College has developed master's programs, and Rider College has established an M.B.A. program. Also during the 1960's the state colleges expanded their graduate programs to include some fields of liberal arts, and Newark College of Engineering began doctoral programs.

TOTAL STATE GRADUATE ENROLLMENT AND DEGREES

The New Jersey system of higher education offers a diverse range of programs at the graduate level. Most of the state's graduate and professional degree programs are offered by universities. A smaller proportion is offered by colleges and professional schools. (See Appendixes B and D.) This year 29,759 students enrolled in postbaccalaureate courses in New Jersey (2.9 percent of the national enrollment).[10] Of these, 80 percent were candidates for graduate degrees: 72 percent as degree candidates in academic fields and 8 percent as candidates for first professional degrees. The remaining 20 percent took courses in which credit was granted, but not applied, toward a degree. Many such students attend graduate credit courses to further their professional standing as teachers.

PROFESSIONAL DEGREES CONFERRED

Professional Degrees as defined by the Higher Education General Information Survey (HEGIS) include degrees in Architecture, Chiropody, Dentistry, Medicine,Optometry, Osteopathy, Pharmacy, Veterinary Medicine, Law and Theology. All professional degrees require a minimum of six years post secondary study for completion. Institutions in New Jersey grant degrees in Law (J.D. and LL.B.), Medicine (M.D.), Dentistry (D.D.S. and D.M.D.) and Theology (B.D. and B.Th.). All other graduate degrees are classified under the HEGIS survey as academic degrees leading to a masters or Ph.D. degree. New Jersey institutions granted 652 degrees in professional areas in 1969. Sixty percent of the professional degrees conferred in 1969 were granted by independent institutions.

Eight institutions in New Jersey grant first professional degrees: Rutgers and Seton Hall in law; New Jersey College of Medicine and Dentistry in medicine; N.J.C.M.D. and Fairleigh Dickinson in dentistry; Princeton Theological Seminary, Drew University and New Brunswick Theological Seminary in Theology. During 1969, more law degrees (318) were granted than any other first professional degree, constituting 49 percent of the total number of first professional degrees granted. Theology ranked second with 184 degrees or 28 percent; medicine and dentistry accounted for the remaining 23 percent, awarding 150 degrees.

---

[10] "Opening Fall Enrollment in Higher Education, Institutional Data," OE-54003-68-B, 1968.

PROFESSIONAL ENROLLMENT

Patterns of enrollment for professional degrees were similar to that for degrees conferred. Law continued to have the largest enrollment (1,224) with theology second (749). Except for Seton Hall's part-time law program all other professional degree programs are generally operated on a full-time basis with very few part-time students. Similar to the degrees conferred, independent colleges enroll the greater proportion of first professional students.

GEOGRAPHICAL DISTRIBUTION OF PROFESSIONAL PROGRAMS

At the present time, all of the state's first professional programs, with the exception of law at the Rutger's Camden campus, are located in the central and northeastern portions of New Jersey.

ACADEMIC DEGREES CONFERRED

Eighteen institutions in the state offer graduate programs in academic areas. New Jersey institutions granted 5,249 degrees in 1969. Fields in which the majority of graduate degrees were granted are: education, engineering, social science and business and commerce.

During 1969, more graduate degrees were granted in education than in any other area. Approximately 43 percent of New Jersey Master's degrees and 6 percent of New Jersey doctoral degrees were granted in education. At the master's level, each of three of the four major fields within education (general teaching, special teaching, and administration and guidance) exceeded every field of degrees conferred, except business and commerce.

Engineering graduate programs awarded 10 percent of the total New Jersey master's degrees and 18 percent of the doctoral degrees in 1969. Over half of all graduate degrees in engineering were awarded by independent institutions.

Social science graduate programs constituted 9 percent of the master's degrees and 9 percent of the doctoral degrees in 1969. The majority of social science graduate degrees were conferred by public institutions.

Business and commerce graduate programs awarded 11 percent of the total master's degrees in 1969. The majority of these degrees were conferred by independent institutions.

Another significant academic area is biological sciences. Nearly 14 percent of the total New Jersey doctoral degrees awarded in 1969 were conferred in the biological sciences. Almost all of these degrees were granted by public institutions.

ACADEMIC PROGRAM ENROLLMENT

Education had the largest graduate enrollment at the master's level for both full-time (17 percent) and part-time (56 percent) graduate students. At the doctoral level it was not the largest but still contributed a major share for both full-time (6 percent) and part-time (20 percent) enrollment.

Engineering programs at the graduate level attracted a major share of the enrollment. For the master's level, 9 percent of the full-time and 7 percent of the part-time were enrolled in engineering. At the doctoral level, engineering was even larger, with 16 percent of the full-time doctoral enrollment and 29 percent of the part-time.

Social science graduate programs attracted significant percentages of the enrollment at both the master's (16 percent of full-time and 5 percent of part-time students) and the doctoral level (17 percent of full-time doctoral students and 11 percent of part-time doctoral students).

GEOGRAPHICAL DISTRIBUTION OF ACADEMIC PROGRAMS

Most of the master's level programs in education are offered by public institutions in the central and northern part of New Jersey. Glassboro State College and Rutgers — Camden offer the only graduate programs in education in southern New Jersey. Seton Hall has the largest graduate education program among the independent institutions.

All of the institutions granting graduate degrees in engineering fields are located in central and northern New Jersey. Other major fields for graduate degrees also follow this pattern.

4. PROFESSIONAL PROGRAMS SUMMARY

INTRODUCTION

This section describes the major professional programs offered by New Jersey institutions of higher education and the need for professionally trained manpower in these fields, both in New Jersey and the United States. This discussion touches on only a small portion of the manpower spectrum. Certainly New Jersey needs musicians, sales executives, insurance brokers, museum directors and many other professions in addition to the professional fields mentioned here. The selection of fields was based on two criteria: 1) the availability of data in regard to the demand for people in a particular profession and 2) the range and size of programs presently offered within the state system of higher education.

The fields discussed in this section are accounting, architecture, dentistry, dental hygiene, education, engineering, medical assistance, law, librarianship, medicine, nursing, pharmacy, and social work.

For no field except education is there a comprehensive study of manpower demand. Data which are available are rough and give only general indications of need by comparing New Jersey with national standards or trends. Data on degrees and enrollments for the state and for the nation have been taken from the 1968 and 1969 Higher Education General Information Survey.

ACCOUNTING

There are approximately 2,300 certified public accountants practicing in New Jersey. Because of the high concentration of business and industry in the state, New Jersey's need for accountants is very large. New CPA's in New Jersey typically receive several job offers.

In New Jersey, training in accounting at the associate degree level is available at eleven county colleges and at Rider College. By 1970 programs in accounting will be offered at all fourteen county colleges.

Baccalaureate degrees in accounting were granted by Bloomfield College, Fairleigh Dickinson University, Saint Peter's College, Seton Hall University, Upsala College and Rutgers University in 1969. Fairleigh Dickinson University and Seton Hall University granted nearly two-thirds of the bachelor's degrees.

At the graduate level, programs in professional accounting are offered by Rutgers at Newark, Seton Hall University, and Fairleigh Dickinson within their schools of business administration. The professional accounting program at Rutgers-Newark is offered during the day and includes a two month internship with a firm of certified public accountants under the supervision of the school's Division of Professional Accounting. Students may also prepare themselves for the CPA examination by enrolling in the evening program in business administration. At Fairleigh Dickinson University and at Seton Hall University, business administration accounting programs within the Schools of Business Administration are available in both day and evening session.

Graduates of master's of business administration programs in accounting are also qualified to take the national CPA examination. Most of the enrollment in professional accounting programs leading to the M.B.A. in New Jersey is at Rutgers School of Business Administration which enrolled 84 percent of the 738 graduate students in this field in 1968.

The state depends on out-of-state institutions for postsecondary preparation of many accountants. Of the professional accountants registered with the New Jersey Society of Certified Public Accountants, only a small number received degrees from New Jersey colleges and universities.

ARCHITECTURE

The architectural profession is considerably smaller in membership than other professions. Nationally there are 30,000 registered architects compared to eight times that number of lawyers, nine times that number of doctors, and thirty times that number of engineers. In New Jersey there were approximately 1,700[11] registered architects in 1968 compared to 7,000 doctors and 10,000 lawyers. New Jersey's share of the national pool of registered architects is slightly larger than its share of population.

In New Jersey, professional training in architecture is available only at the School of Architecture of Princeton University. In 1969 19 baccalaureate and 4 master's degrees were granted by Princeton University. Gloucester and Mercer County Colleges offer career programs in architectural engineering. Newark College of Engineering, Essex County and Mercer County Colleges offer career programs in architectural drafting. The NCE program grants certificates. The Essex and Mercer County College programs grant associate degrees.

The New Jersey Society of Professional Architects has for several years sought the establishment of another school of architecture in the state. Traditionally the state has had to depend on out-of-state schools to supply professional architects. In 1969 all but one of the graduating architects at Princeton University planned to practice outside the state. During 1968 New Jersey used the services of approximately 1,250 architects from other states who were granted reciprocal licenses. This represents more than two-thirds of the total in-state professional architectural community.

DENTISTRY

All dentists in New Jersey are licensed by the State Board of Dentistry. In 1968 the Board issued 190 licenses to applicants who passed the qualifying examination. There are now 4,289 dentists practicing in New Jersey, which yields a ratio of about 63 per 100,000 population compared to a national ratio of about 59 per 100,000 population.[12]

The School of Dentistry at Fairleigh Dickinson University and the New Jersey College of Medicine and Dentistry offer the only programs in the state leading to the first professional degree of doctor of dental surgery.

The School of Dentistry at Fairleigh Dickinson University, which is located on the Teaneck campus, conferred its first doctor of dental surgery degrees in 1960. It is approved by the New Jersey State Board of Dentistry, by the Council on Dental Education of the American Dental Association, and by the New York State Board of Regents. A student may enter the program in dentistry at Fairleigh Dickinson University either in a combined seven-year program leading to the B.S. and the D.D.S. degrees or after two or more years attendance at another baccalaureate institution.

The School of Dentistry at the New Jersey College of Medicine and Dentistry offers a four-year graduate program leading to the D.D.S. degree. The dental classes are now held on the Jersey City campus of the College but will move into temporary facilities at the Newark campus in 1970. The School of Dentistry of the New Jersey College of Medicine and Dentistry is approved by the New Jersey State Board of Dentistry and by the Council of Dental Education of the American Dental Association.

In 1969 the New Jersey College of Medicine and Dentistry conferred 34 D.D.S. degrees and Fairleigh Dickinson University conferred 46 D.D.S. degrees.

---

[11] Data from the New Jersey Board of Architect Registration.

[12] Data from the American Dental Association, Bureau of Economic Research and Statistics.

EDUCATION

Teacher training is one of the primary curricular areas of higher education in New Jersey. Until recently, public school populations have grown steadily. Over the seven-year period from 1961 to 1968, public school enrollment in New Jersey increased 28 percent. Between now and 1975, in contrast, enrollment is expected to increase only 6 percent. However, the expanding emphasis on preschool and special education and the growing demand for special services and administrative personnel represent a new orientation with which the supply of teachers and school personnel must be carefully articulated.

Many of the teachers produced by New Jersey institutions of higher education have acquired specific training which equips them to work in special education programs where there is still a critical shortage of qualified personnel. For example, several of the state colleges and Seton Hall University offer programs for teachers in speech and hearing, education of the mentally retarded, and education of the emotionally disturbed. Jersey City State College offers a program for teachers of the crippled and of the partially sighted. Seton Hall specializes in educating teachers of the blind. Trenton State College and Newark State College have also been training members of the teacher corps who will be teaching economically and culturally deprived children. This is by no means a comprehensive listing, but it illustrates the diversity of special education courses available at New Jersey institutions.

Besides the significant number of baccalaureate programs in elementary and secondary education and the programs of specialization offered by New Jersey institutions, many graduate programs are available in education. All six state colleges, Fairleigh Dickinson University, Seton Hall University, and Rider College offer master's degree programs in education. Rutgers University offers both master's and doctoral programs in several areas of education.

In 1969, 24 percent of the bachelor's degrees and 35 percent of the advanced degrees granted by New Jersey institutions were in the field of education. Nearly 90 percent of bachelor's and advanced degrees granted by state colleges were in education. Nationally 21 percent of bachelor's and 34 percent of advanced degrees granted in 1968 were in the field of education.

Approximately 25 percent of the state's baccalaureate degree recipients are prepared for teacher certification in New Jersey upon graduation. Traditionally about 70 percent of elementary teachers and 85 percent of secondary teachers who graduate from New Jersey colleges each year begin teaching the following September.[13]

A 1966 survey by the State Department of Education showed certain imbalances between teacher supply and demand in New Jersey. Unless present patterns of student choice in teaching preparation are changed, severe shortages may be expected in the following certification areas: vocational teachers, school psychologists, school librarians, teachers of the handicapped, teachers of industrial arts and home economics, teachers of science and mathematics, guidance personnel, and school nurses. If present trends continue, the oversupply of men's physical education teachers and social studies teachers will intensify. Further imbalance exists in geographic distribution of teacher supply and demand. Many of the state's rural areas and older metropolitan centers face a critical shortage of certified personnel, while suburban areas, especially in the northeast portion of the state, cannot employ all of the fully certified New Jersey residents who apply to the public schools.

In terms of overall teacher needs, New Jersey schools will be well supplied in the coming years. Although the proportion of students in teacher preparation programs may decline as the state colleges become multipurpose institutions, the number of students in teacher preparation should remain about the same. If present rates of teacher attrition, teacher service, and enrollment growth continue, the number of beginning teachers needed annually will pass a peak of 5,300 in 1969 and will decline to an annual

[13] "Teacher Supply and Demand in Public Schools, 1968" Research Division, National Education Association.

figure between 4,000 and 4,300 during the 1970's.[14] More than this number of certified new teachers have been supplied annually from New Jersey institutions in the past.

Clearly the task of the colleges and universities of New Jersey in the field of elementary and secondary education will be to meet the changing needs for teachers by the allocation of programs and degrees within a relatively stable enrollment.

The demand for college and university teachers, however, will continue to increase as enrollments grow in New Jersey institutions. Planning should begin now to ensure that graduate education opportunities are available in sufficient quantity to ensure that New Jersey trains an appropriate share of higher education teachers during the coming years.

ENGINEERING

The proportion of professional workers who are engineers is higher for New Jersey than it is for the nation.

Crucial manpower needs exist in engineering. New Jersey's largest industries are manufacturing of basic chemicals and manufacturing of pharmaceuticals. Other growth industries such as manufacture of rubbers and plastics and manufacture of electrical goods and machines contribute to the growing demand for engineers and scientists. Furthermore there has been a substantial increase in research and development activities in the state. New Jersey employed 34,600 engineers in 1966, 4.5 percent of all engineers employed in the United States. By 1975 the state is expected to need approximately 30,000 new engineers, an average of 3,000 new engineers annually. In 1969 New Jersey granted 2,120 degrees in engineering at all levels.

New Jersey has six institutions which offer baccalaureate and advanced programs in engineering: Princeton University, Stevens Institute of Technology, Newark College of Engineering, Rutgers, Fairleigh Dickinson and Monmouth.

Advanced degrees were granted by Princeton, Stevens, NCE, and Rutgers; NCE and Stevens granted most of the masters degrees; Princeton granted the bulk of Ph.D. degrees.

Two-year associate degrees in engineering studies were granted by two private and three public institutions. Fairleigh Dickinson University, Monmouth College, Cumberland County College, Mercer County College, and Middlesex County College granted associate degrees in 1969. Mercer County College supplied most of the graduates. By 1970 twenty-two separate degree programs in engineering-related subjects will be available at the public two-year colleges in New Jersey.

The number of baccalaureate degrees in engineering granted in the United States has been relatively constant at about 38,000 per year since 1958. Nationally the percentage of engineering bachelor's degrees in relation to

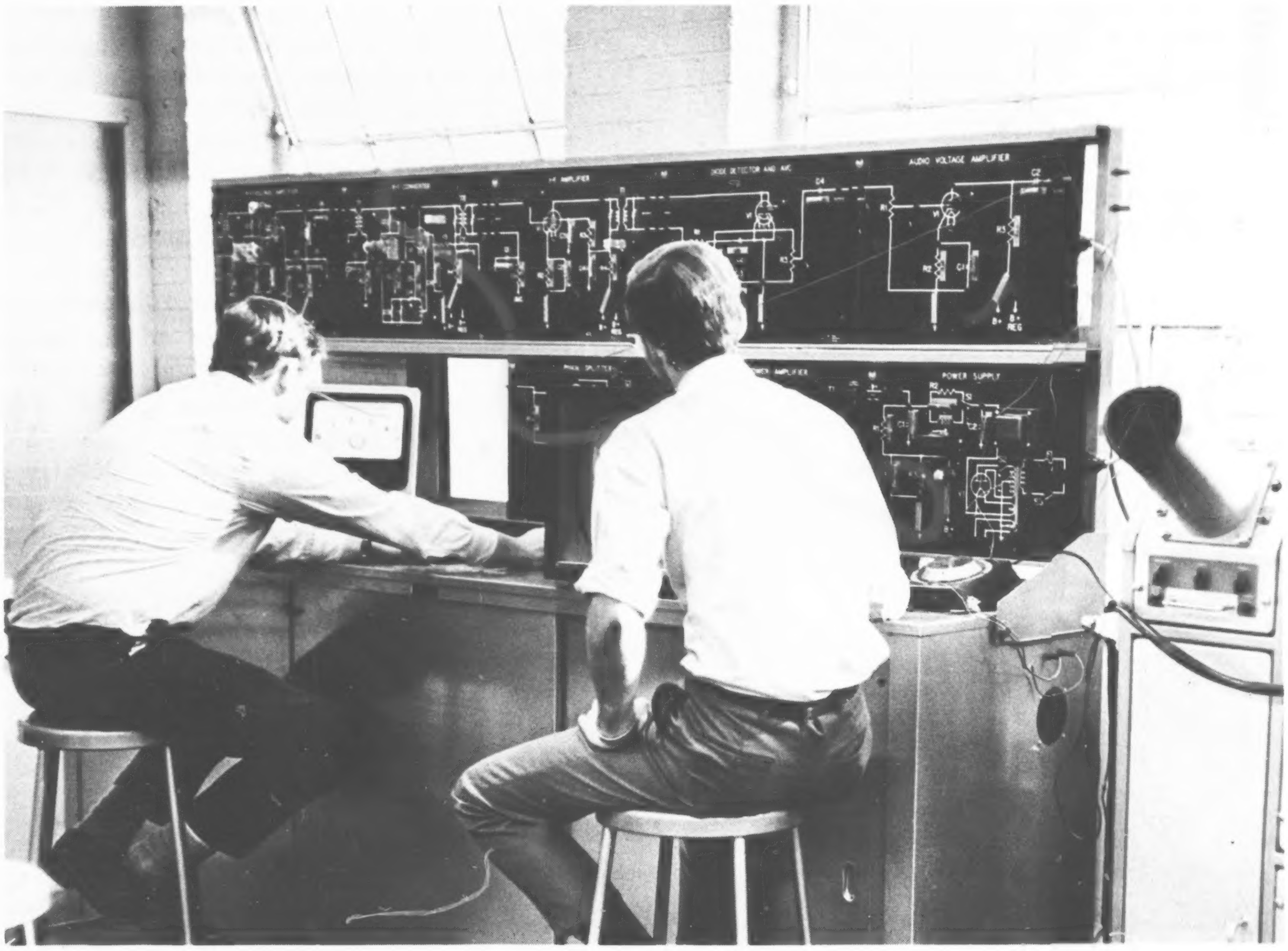
[14] State Department of Education, 1966 survey; and "Meeting New Jersey College and University Facilities Needs through 1980," Robert Heller Associates, 1968.

total bachelor's degrees awarded to men has declined from 17 percent in 1959 to 6 percent in 1968. In New Jersey the percentage was 6.5 percent in 1968.

The low percentage of bachelor's degrees awarded in engineering in New Jersey is due primarily to the fact that students are showing less interest in engineering as a major field of study at the baccalaureate level. Programs presently offered at the baccalaureate level by New Jersey institutions are not enrolled to capacity and have lower enrollments now than in 1965.

Nationally the number of master's degrees in engineering as a proportion of B.S. degrees in engineering has increased from about 18 percent in 1958 to 40 percent in 1968 and is expected to level off at about 75 percent by 1975. The proportion in New Jersey in 1968 was 44 percent. The percentage of Ph.D. degrees as a proportion of B.S. degrees in engineering is also increasing, from about 2.7 percent nationally in 1958 to 7.7 percent in 1968 with the expectation that it will reach about 10 percent by 1975. The proportion in New Jersey in 1968 was 6.1 percent.

The implication of these statistics is that a master's degree rather than a bachelor's degree will be increasingly considered the minimum acceptable academic credential for engineers. Thus graduate education in engineering is important in any proposed program to meet manpower needs in New Jersey, and New Jersey's institutions have been moving toward providing more graduate education in engineering.



LAW

Three institutions in New Jersey — Rutgers University at its Camden campus and its Newark campus and Seton Hall University — offer programs in law. All three colleges are engaged in instruction of graduate students working toward the first professional degree.

In 1968-1969, total professional enrollment at the three law schools was 1,224, and 318 degrees were granted. The Rutgers' School of Law at Camden and at Newark enrolled approximately 550 students. Seton Hall University Law School enrolled 674 candidates for the first professional degree, many of whom were part-time students.

In addition Seton Hall contemplates offering a continuing education program for lawyers and law enforcement officials through its evening division. Both the Camden and Newark Schools of Law plan to increase their legal research and continuing education functions. During 1968 several special institutes were run by the law school faculties.

New Jersey depends on other states to educate more than half of its law students. In 1968 approximately 1,200 New Jersey residents entered the first year of law school somewhere in the United States. Only 506 of these students attended law schools in New Jersey.[15] About 600 lawyers were admitted to the New Jersey Bar in 1968, of which less than 60 percent graduated from New Jersey law schools. There are presently 10,000 lawyers practicing in the state.[16] None of the three existing law schools in New Jersey plan to expand their enrollments significantly beyond the level which they will have attained by 1970.

LIBRARIANS

School librarians in New Jersey must be certified by the Board of Teacher Certification. In 1968 new licenses for school librarians numbered 284. There were 177 graduates of librarian training programs at all levels in New Jersey institutions. In 1968, 176 master's degrees in library service and one Ph.D. degree in library service were granted by Rutgers. While the number of librarians employed outside the public school system is not included in the number certified, librarian certification is nevertheless an indication of manpower demand in this field since about half of the librarians employed in the state are working in public schools. Other professional librarians are employed by industry, public libraries, and colleges.

Baccalaureate programs which will fulfill the requirements for certification as a school librarian are available in New Jersey at all state colleges except Jersey City State, at the College of Saint Elizabeth, and at Caldwell College for Women. No baccalaureate degrees were granted specifically in the field of library science. Graduate training in library science is offered by Rutgers.

A 1966 survey by the State Department of Education showed a pattern of increasing shortages in the field of school librarians. If present trends continue, a severe shortage could result in this area by 1975.

At the graduate level, demand for librarians is greater than the supply. Graduates of the Graduate School of Library Service at Rutgers usually have a choice of positions open to them upon completion of the master's or doctoral requirements. Industries, colleges, and public libraries in the state and bordering metropolitan areas are continually seeking professional librarians with master's level preparation.

---

[15] Department of Health, Education, and Welfare, Division of Education Statistics.

[16] Estimate of State Security Fund Commission, confirmed by Clerk of Superior Court who oversees bar examinations.

MEDICAL ASSISTANCE AND DENTAL HYGIENE

The state of New Jersey presently does not license allied health personnel other than physicians, dentists, dental hygienists, and nurses. The State Board of Registration and Examination in Dentistry grants licenses to dental hygienists. During 1968, 91 dental hygienists were licensed in New Jersey. Of 971 licensed dental hygienists in New Jersey, only 361 were employed in the state during 1968.

Fairleigh Dickinson University offers a program leading to the A.S. degree in dental hygiene at the Teaneck campus. The course is approved by the Council on Dental Education of the American Dental Association. Students who have completed the two-year course in dental hygiene may also complete the requirements for the bachelor of science degree with two additional years of academic work in the liberal arts and sciences.

A two-year program leading to the A.S. degree in dental hygiene is also offered at Morris County College. By 1970 a similar program will be offered at Camden County College, and by 1971 at Middlesex and Atlantic County Colleges. An abbreviated dental assistance course is now offered at Union County Technical Institute.

Programs leading to the A.S. degree for medical assistants are offered by Essex County College and Union County Technical Institute. Other allied health programs relating to medical or laboratory work will be offered by eleven county colleges by 1970. Also, in cooperation with the New Jersey State Medical Assistants Association, Jersey City State College has begun several college credit courses at the Center for Medical Assistants. In 1968 Rutgers University, Fairleigh Dickinson University, and Centenary College graduated students in medical technology.

PHYSICIANS

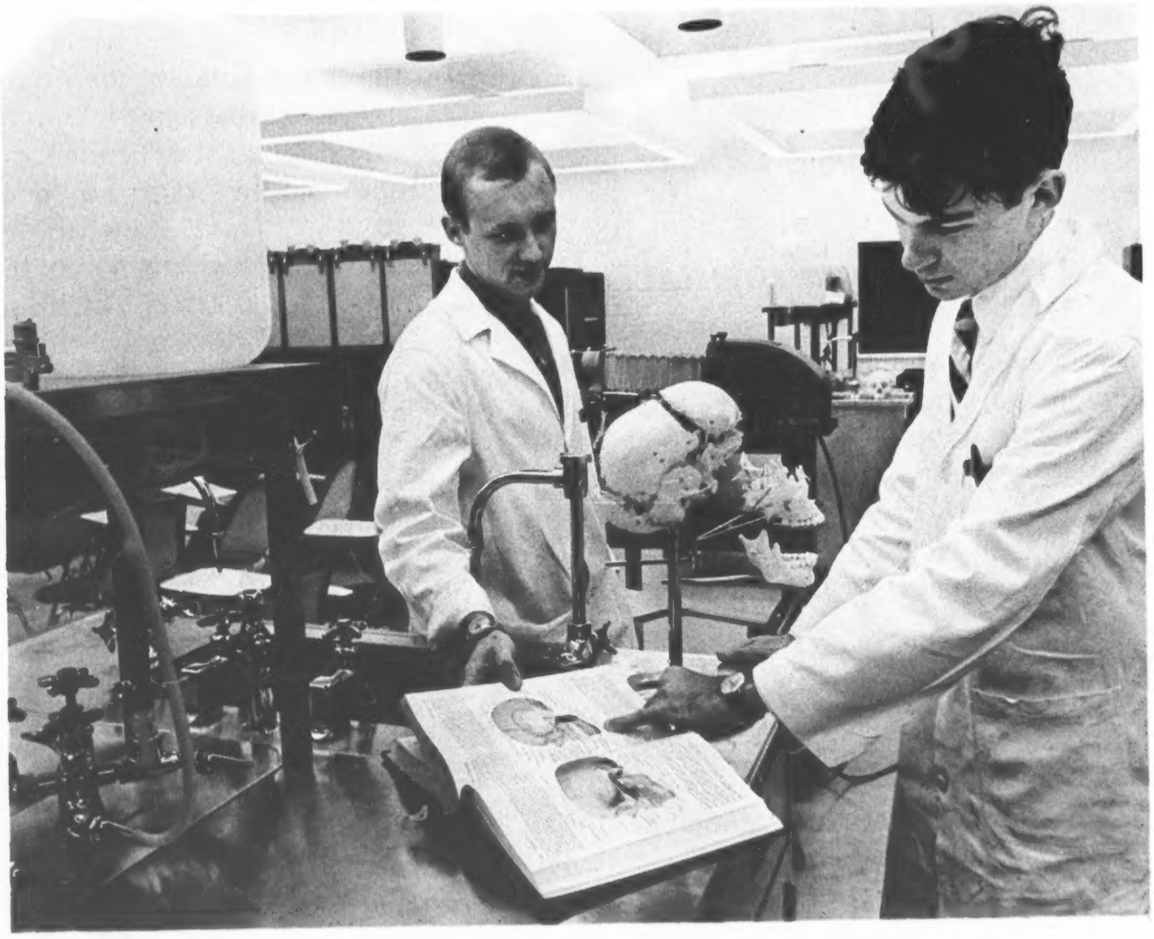
Research published by the American Medical Association[17] reveals the following facts about doctors and medical education in New Jersey. The ratio in New Jersey of doctors actively involved in patient care to population is somewhat lower than the rest of the nation: 125 doctors per 100,000 population in New Jersey compared to 164 doctors per 100,000 population in the mid-atlantic states and 129 doctors per 100,000 population for the United States. This figure, however, masks the uneven distribution of doctors and the relative scarcity of medical care in some areas of the state. By metropolitan area (SMSA), the ratio of doctors active in patient care to population is as follows: Atlantic City 140 doctors per 100,000 people; Jersey City 124; Long Branch 120; Newark 163; New Brunswick 89; Paterson 126; Trenton 180. Thus, the state as a whole and all the metropolitan areas except Trenton have fewer doctors per person than the mid-atlantic average. The whole state and metropolitan areas except Newark, Trenton, and Atlantic City have fewer doctors per person than the national average. Furthermore, many disadvantaged urban citizens do not benefit from the large number of doctors in some cities because many doctors are specialists or have a limited practice.

The average age of New Jersey physicians is fifty-one years; 65 percent of all physicians are under age fifty-five. The preponderance of physicians in the younger age group indicates that New Jersey is relatively well protected against loss of a large number of physicians because of death and retirement in the coming years. The prepondance of younger doctors also indicates that New Jersey citizens are receiving at least as much medical care as the physician-to-population ratio implies. Usually older physicians near retirement age carry a smaller workload, especially in patient care, than do younger doctors.

On the national level the number of applicants accepted to medical school has risen steadily over the last decade with 321 more applicants accepted in 1966-1967 than in 1957-1958. New Jersey residents parallel the national

---

[17] "State, County, and Metropolitan Statistics, 1968," American Medical Association.



trend. The ratio of New Jersey residents who are first-year medical students to population rose from 5.7 per 100,000 in 1957-1958 to 6.4 per 100,000 in 1966-1967, moving the state from a rank of eleventh to sixth nationally. A total of 435 New Jersey residents entered medical schools in the continental United States in 1965.

Medical education leading to a M.D. degree is available in New Jersey at the New Jersey College of Medicine and Dentistry, which granted 104 first professional degrees in 1969. New Jersey College of Medicine and Dentistry is engaged in the instruction of medical students and graduate students working toward the master's and the Ph.D. degree. 1968 enrollment was composed of 315 medical students and 11 Ph.D. students — a total of 326.

Rutgers offers a two-year professional medical program. On graduation, these students enter third-year classes at other institutions. In recent years, Rutgers has graduated about 16 students annually and has plans to expand its medical school to a four-year program.

New Jersey, however, depends heavily on out-of-state training for doctors. More than 99 percent of New Jersey's practicing doctors received M.D. degrees from out-of-state institutions with most of the degrees coming from Jefferson, Hahnemann, and New York University. Seventeen percent of New Jersey doctors were educated abroad.[18] New Jersey is doing a great deal compared to fifteen years ago when there was no medical school in the state. However, there is still a serious national shortage of doctors, and the state must help to meet this demand.

---

[18] Data from a survey of members of the New Jersey Medical Society listed in the 1968 directory, 10 percent sample.

NURSING

With increasing demand for all types of health services, New Jersey's demand for nurses will continue to grow. Presently the state has 289[19] licensed, active registered nurses per 100,000 population compared to 331[20] per 100,000 nationally. The goal set forth in the Surgeon General's Report "Toward Quality in Nursing — Needs and Goals," for a national standard of nursing care considerably surpasses the 331 per 100,000 figure. The report indicates the minimum need for licensed active registered nurses is 400 per 100,000, and the maximum need is about 500 per 100,000.

Many qualified nurses are not active in the profession. In New Jersey in 1962 only 59 percent of the registered nurses were active. This unused potential may be viewed in two ways: 1) as a reserve of professional talent which might be tapped, or 2) as an indication of professional talent which might become partially available. Many nurses maintain dual or triple state registration but may not be working in any state.

In 1968 associate programs in nursing were available at ten county colleges and at Fairleigh Dickinson University. However, Fairleigh Dickinson will not offer the associate degree program in nursing after 1969. Felecian College has established an associate degree program in nursing which should graduate its first students in 1970. By 1970 two additional county colleges will offer associate degrees in nursing. Union College also offers a short course for qualification as a school nurse. Altogether, New Jersey institutions granted 170 associate degrees in nursing in 1969.

At the baccalaureate level Rutgers College of Nursing, Seton Hall University School of Nursing, Fairliegh Dickinson University, and Trenton State College offered full curricula in nursing leading to a B.S., B.A., or B.S.N. degree. Glassboro State College and Jersey City State College also granted B.S. degrees in nursing during 1968 although there are not formal nursing curricula at the colleges. Paterson State College and Bloomfield College have begun new baccalaureate programs in nursing which will graduate nurses in 1970.

Students wishing to pursue a course of study which will fulfill the requirements for ceritification as a school nurse may do so at Fairleigh Dickinson University, Seton Hall University, Jersey City State College, and Trenton State College. Evening courses in nursing are available at Fairleigh Dickinson, Seton Hall and Trenton State. In 1969 New Jersey institutions granted 249 baccalaureate degrees in nursing and 76 baccalaureate degrees in school nursing. Seton Hall, Rutgers, and Fairleigh Dickinson granted more than two-thirds of all the bachelor's degrees in nursing.

At the master's level a course in psychiatric nursing leading to an M.S. degree is available through the Rutgers Graduate School. Classes are held at the Newark campus where the College of Nursing is located.

Both Seton Hall University and Rutgers College of Nursing (in cooperation with the University Extension Service) offer noncredit courses to advance the professional standing of registered nurses. Seton Hall offers these courses at its South Orange campus on a regular basis. Rutgers offers courses and institutes in centrally located areas within the state. They are given continuously for one or more weeks or on a weekly basis for at least six weeks.

It is clear from present statistics that New Jersey must produce many more professional and paraprofessional nursing personnel annually if the state is to achieve a desirable standard of health care. The Nursing Education Advisory Committee of the Board of Higher Education is now making a study of present and projected nursing manpower needs in New Jersey. The recommendations of the Advisory Committee on the future needs of the state will be incorporated into the higher education planning process.

---

[19] State Board of Nursing, Total active licensed nurses 20,826. Population 7,203,510.

[20] American Nurses Association "Facts about Nursing," and State Department of Higher Education, 1968

PHARMACY

Pharmacists are licensed by the state after an examination which follows five years of training at baccalaureate level and one year of internship in a full-time post graduate position. In 1968 New Jersey licensed 145 pharmacists by examination and 30 pharmacists by reciprocity. The New Jersey Pharmaceutical Association projects a need for approximately 181 new pharmacists annually for the next several years.

The state has 5,850 active pharmacists, which is slightly more than its share based on population. In 1968 New Jersey had 61.7 resident registered pharmacists per 100,000 population compared to a ratio of 60.6 nationally. The American Association of Colleges of Pharmacy uses a 1965 national average ratio of 67.0 as a standard of good pharmaceutical coverage. New Jersey institutions granted 88 degrees at all levels in pharmacy during 1968. This was 1.5 percent of national bachelor of pharmacy degrees, which is considerably less than its share based on population. Since New Jersey employs more than the average proportion of its pharmacists in research, the state's appropriate share of annual graduates should be even greater than that based on population alone.

In New Jersey a baccalaureate program in pharmacy is available only at the College of Pharmacy at Rutgers-Newark in a joint program with the College of Arts and Sciences at Rutgers-Newark. The College of Pharmacy is accredited by the American Council on Pharmaceutical Education. Entering students must meet the entrance requirements of both colleges and, after successful completion of the five-year curriculum, are recommended for the two degrees of bachelor of science and bachelor of pharmacy.

The College of Pharmacy operates the Pharmaceutical Extension Service, which offers placement services for graduates, assists state agencies with drug control and purchasing problems, and works closely with persons in business, industry, and wholesaling phases of pharmacy. The Extension Service also issues the Pharmacy Extension Newsletter.

Graduate work in pharmacy and pharmaceutical science leading to the Ph.D. is available at the Rutgers College of Pharmacy in Newark. Programs leading to the master of science degree are also offered in pharmacology, pharmacy, and pharmaceutical chemistry.

SOCIAL WORK

The lack of adequate data on which to base manpower estimates is particularly severe in the field of social work. One study has been made by the Graduate School of Social Work at Rutgers.

According to this 1966 study, the state of New Jersey will require 4,800 associate level, 3,200 baccalaureate level, and 1,600 master's level social workers by 1975. This indicates an average annual demand of 480 associate level, 320 baccalaureate level, and 160 masters level social workers. In 1968 in New Jersey, 85 degrees were granted by the Rutgers School of Social Work. These were the only degrees classified in the field of social welfare at any level.

The state colleges were authorized in 1965 to develop a 32-credit, part-time master's program leading to a certificate in pupil personnel. Graduates of that program may become either guidance counselors or school social workers. Such programs are a valuable source of guidance personnel for the schools but do not provide the personnel needed at the masters level.

One indicator of the unmet needs for social workers is the vacancies in state and local government. During 1968, 200 vacancies remained unfilled in state government positions. County and local government agencies employ approximately three times the number of social workers as the state. Vacancies at the county and local level are estimated at about 50 percent which means 500 to 600 vacancies. Other indicators of crucial need for social welfare personnel are the number of training and paraprofessional positions being created by state, county and local agencies. In the New Jersey state government, 325 employees were classified as temporary or noncertified in 1968. At present, 20 to 30 percent of all state social work personnel are in training positions. At the county level a large number of paraprofessional positions have been created to compensate for a lack of qualified caseworkers. During the past year several examinations for state and county social work positions have received no applicants.[21] Although these data are incomplete, the overwhelming implication of available information is that the demand for social work personnel is very much in excess of the available supply.

---

[21] Data from the Department of Civil Service, Research and Planning Division.

Chapter IV C

ENROLLMENTS

INTRODUCTION

This section deals with 1968 enrollments and enrollment trends in the New Jersey system of higher education. The discussion begins in Part 1 with an analysis of the future plans of high school graduates in June, 1968. In Part 2 an analysis is included on the proportion of New Jersey residents enrolled at higher education institutions in other states compared to those enrolled in New Jersey.

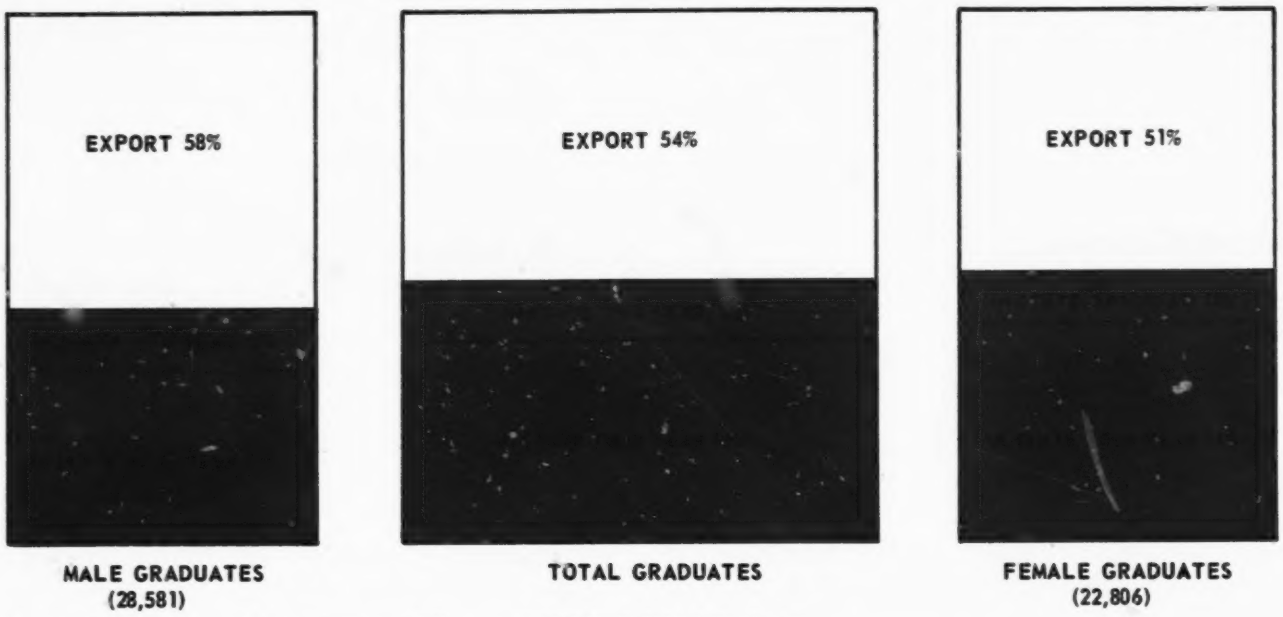
Part 3 briefly outlines the enrollment trends by level (associate, baccalaureate and graduate and professional) and control (public or private). In general, New Jersey has paralleled national trends of rapidly increasing enrollments at all levels of higher education. However, even with these recent large increases in enrollments New Jersey falls far short of educating its proportionate share of national enrollments.

Part 4 contains an analysis of 1968 enrollments based on data from the 1968 HEGIS survey, 1968 Undergraduate Enrollment Survey and 1968 Part-time Education Survey. Enrollments are studied for several categories: (a) geographic distribution, (b) county of origin of students, (c) public and private college enrollments and (d) minority group enrollments. This section shows that a majority of institutions as well as students are located in the northeastern part of the state and that approximately two-thirds of the students enrolled at each level in the New Jersey system of higher education attend public institutions.

Part 5 concludes the enrollment discussion with an analysis of enrollment projections for both full-time and part-time students at the several levels in the system of higher education.

FIGURE 15

DISTRIBUTION OF 1968 HIGH SCHOOL GRADUATES GOING ON TO HIGHER EDUCATION BY LEVEL AND SEX



Source: Department of Higher Education, Follow-up on 1968 High School Graduates.

1. HIGH SCHOOL GRADUATES

In 1968, over 93,000 students graduated from New Jersey public and private institutions of secondary education. Approximately two-thirds of these students went on to post-secondary education in New Jersey or out-of-state. Of the two-thirds that went on to post-secondary education, approximately eighty percent attended two or four year institutions of higher education (See Appendix E), while twenty percent of those that went to post-secondary education entered various technical, business, vocational or apprenticeship programs.

Figures 15 and 16 give a summary of attendance patterns of students going on to higher education after graduating from New Jersey high schools in 1968. Preliminary 1969 data is included in Appendix F. Figure 16 shows that fifty-four percent of all students going on to college in 1968 attended out-of-state institutions.

In 1966, 60% of high school graduates who went to college attended out-of-state. In a survey, guidance counselors throughout the state reported that one-quarter of those freshmen attending outside the state would have preferred to remain within the state if space had been available. In other words, at least 15 percent of the total high school graduates going on to college (6,400 students) were forced to attend college outside New Jersey contrary to their preferences.

If we assume that one-quarter of all freshmen going outside the state would have preferred to remain in-state for 1968, then 13.5 percent of all high school graduates going on to college (6,700) were forced to attend institutions outside New Jersey contrary to their preferences.

FIGURE 16

Distribution of 1968 High School Graduates Who Went on to Institutions of Higher Education

	4 YEAR INSTITUTIONS		2-YEAR INSTITUTIONS		OTHER		TOTAL
	In-state	Out-of-state	In-state	Out-of-state	In-state	Out-of-state	
Public	24%	38%	12%	5%	*	*	79%
Private	8%	10%	2%	*	*	*	20%
TOTAL	32%	48%	14%	5%	*	1%	100%

* less than 1%
Source: State Department of Higher Education "Follow-up on 1968 High School Graduates"

2. IN-STATE AND OUT-OF-STATE ENROLLMENTS

Forty-seven percent of all New Jersey students attending college in 1968-1969 attended out-of-state institutions. Nationally 20 percent of all full-time students go out of their home state to college.

In Pennsylvania, 22 percent of all college students attended out-of-state institutions and in New York, 18 percent of all college students attended out-of-state institutions.

For part-time education, the great majority of students (90 percent) attended institutions in New Jersey. The remaining 10 percent of New Jersey resident part-time students in 1968 attended schools in New York City and Philadelphia.

3. ENROLLMENT TRENDS

In general, New Jersey has paralleled national trends of rapidly rising enrollments at all levels of higher education. However, since the state educated such a small proportion of its college-age students at the time it began to enlarge the public institutions of higher education, New Jersey still does not educate its proper share of national enrollments.

Full-time enrollment in New Jersey institutions grew from 50,995 in 1961 to 93,933 in 1968 — 87,110 undergraduate and 6,823 graduate students.

Enrollment at the associate degree level is increasing much faster at the new public institutions than at the independent institutions. In 1960 virtually all two-year students were enrolled in independent institutions; by 1968 the proportion enrolled in independent institutions had decreased to 27 percent. In absolute numbers, enrollment at independent institutions has held steady at about 3,800 students, while enrollment at public institutions increased from zero to nearly 22,000 students in 1968.

The great enrollment surge in baccalaureate programs in New Jersey began in the years immediately following World War II. Rapid growth has been especially noticeable at the state colleges, although nearly all institutions have expanded both programs and enrollment. New Jersey now has 2.2 times more full-time students enrolled as candidates for the baccalaureate degree than in 1950.[22] Similarly, baccalaureate level enrollment nationally has also increased 2.2 times since 1950.[23]

With the general growth of higher education during the post war years, graduate enrollment has increased exponentially. New Jersey's growth in graduate education parallels national enrollment trends. Nationally the number of graduate degrees conferred has quadrupled at the doctoral level and tripled at the master's level since 1950.[24] However, since the state began its graduate enrollment growth at a later date than most states and began from such a low level, New Jersey still ranks well below the national average of graduate enrollments per capita. New Jersey presently enrolls nearly 28,000 students in graduate courses, which is 2.9 percent of the national graduate enrollment.

As graduate enrollments and programs developed rapidly during the postwar years, the character of the graduate student body also changed. Increasing numbers of graduate students enrolled on a part-time basis. Most students were in-service teachers or liberal arts graduates seeking professional qualifications. In fact, the greatest relative enrollment increase in New Jersey since 1950 has occurred in part-time graduate education. Presently more than 80 percent of graduate enrollment in the state is part-time compared to slightly less than 50 percent nationally.[25] Since 1950, New Jersey enrollment in part-time graduate education has increased twenty-two times.

---

[22] 39,005 undergraduate resident enrollment in 1950, OE Education Statistics; 85,333 undergraduate program enrollments and undergraduate occupational program enrollments in 1968, "Opening Fall Enrollment in Higher Education, Institutional Data," OE-54003-68-B, 1968.

[23] OE Educational Statistics 1949-1950 and "Opening Fall Enrollment in Higher Education, Institutional Data," OE-54003-68-B, 1968.

[24] Graduate Education Parameters for Policy, National Science Board 69-2, p. 16, 17.

[25] HEGIS forms submitted in 1968, "Opening Fall Enrollment in Higher Education, Institutional Data," OE-54003-67, 1967.

4. 1968 OPENING FALL ENROLLMENTS

See Appendix G for a list of 1968 fall enrollments by degree and level for each New Jersey institution of Higher Education.

a) *Geographical Distribution*

In New Jersey the greatest proportion of the population lives in the northeastern counties. According to the 1970 population estimates of the Department of Conservation and Economic Development, 55 percent of the population will live in the northern part of the state, 23 percent in the central part and 22 percent in the southern part of the state. The distribution of institutions and of enrollments of higher education follows the same pattern.

Approximately 57 percent of the full-time students enrolled in baccalaureate programs attend institutions in the northeastern part, 36 percent in the central part, and 7 percent in the sourthern part of the state.

Approximately 38 percent of the full-time students enrolled in graduate level professional and graduate programs attend institutions in the northeastern part, 61 percent in the central part, and 1 percent in the southern part of the state.

Institutions in New Jersey enrolled 84,200 part-time students from New Jersey and neighboring states in the academic year 1968. Over one-half of this number, 56 percent attended institutions in Bergen, Essex, Hudson, and Passaic counties. Another 22 percent attended institutions in Mercer and Middlesex counties.

At the baccalaureate level, approximately 65.0 percent of the part-time students attended institutions in the northern counties, 20.5 percent in the central counties, and 14.5 percent in the southern counties. At the graduate level, 69 percent of part-time students attend institutions in the northeastern part of the state, 23 percent in the central part, and 8 percent in the southern part of the state.

b) *County of Origin of New Jersey Undergraduates*

Detailed information on the county of origin of students at each institution is shown in Appendix H. Some general trends appear in the data. As might be expected, most students at two-year institutions enroll in colleges in their own county; this is more true of the public two-year colleges than of the independent two-year colleges, primarily because of higher numbers of commuting students.

At the baccalaureate level, New Jersey full-time students are more evenly distributed among the various institutions. Trenton State College and Paterson State College draw more students from Bergen County than from any other county. At all the other four-year institutions, both public and private, the students tend to come from the same county where the institution is located.

Institutions which offer doctoral level programs tend to draw their undergraduate New Jersey students from many counties in the state, although higher numbers enroll from the county where the institution is located. Exceptions are Princeton, Rutgers-New Brunswick, and Rutgers-Newark. Of the New Jersey residents who are full-time undergraduates at these institutions, most come from Bergen County. At Stevens Institute of Technology, most full-time New Jersey undergraduates come from Union County.

Of the entire part-time student population in New Jersey, about half, 52 percent, resided in the same county as the institution which they attended.

c) *Public and Independent Enrollments*

Total enrollment in the state is divided with 61 percent in public institutions and 39 percent in independent institutions. The public colleges and universities enroll about 59 percent of the full-time and 70 percent of the part-time students.

At the associate degree level, enrollment is split with 82 percent of full-time students attending public institutions and 89 percent of part-time students attending public institutions. At the baccalaureate level, enrollment is split with 61 percent attending public institutions and 39 percent attending independent institutions. Similarly, 64 percent of those enrolled in part-time baccalaureate programs attend public institutions and 36 percent attend independent institutions.

Graduate full-time enrollment figures show 52 percent attending public institutions. Part-time enrollment is divided between 67 percent attending public and 33 percent attending independent institutions.

d) Minority Group Students

In recent years there has been a nationwide effort to enroll more minority group students in institutions of higher education. A few years ago only a small number of minority group students attended New Jersey institutions of higher education. In the academic year 1968-1969, black student enrollment in New Jersey institutions of higher education had grown to 4.34 percent (3,415 students) of the total student population in New Jersey.[26] Black students and Spanish surnamed students made up 6.84 percent of the student population in New Jersey's public institutions. For detailed information on enrollment of minority group students at each institution, see Appendix I.

5. ENROLLMENT PROJECTIONS

All population and enrollment projections indicate that student demand will continue to grow in the future. The college-age population will increase through 1980 from its present level of approximately 400,000 to an estimated 576,000. (See Fig. 4) All recent projections indicate that the number of New Jersey full-time undergraduate students is likely to more than double between now and 1980. These enrollment projections are based upon the assumptions that an increase in expectations, additional facilities, new types of programs, and more state financial aid will enable a larger proportion of New Jersey students to attend institutions of higher education. Enrollment in part-time programs is also expected to grow significantly in the future. And graduate education opportunities also need to be expanded to meet the growing demand of New Jersey residents for postbaccalaureate work.

---

[26] Data for several small private institutions are not available. Figure does not include Spanish surnamed students at Atlantic and Somerset Colleges.

Chapter IV D

STUDENT FINANCIAL AID

The New Jersey undergraduate pays more to go to college than the average resident of the United States. In tuition costs alone the New Jersey student pays 70 percent more on the average than other students in the United States. The high costs of college for New Jersey students result from two principal factors. First, only a small percentage of New Jersey students can be accommodated in low-cost public institutions within the state, forcing many New Jersey students to attend higher-cost private and out-of-state institutions. Secondly, New Jersey does not have an adequate system of student financial aid to offset these high college costs.

New Jersey students and their families are forced to bear an inordinate share of college costs. In 1967 the minimum cost of attending college totaled $335 million for all New Jersey undergraduates. The sources of this $335 million is shown in Fig. 17. Grants totaling $5.8 million were awarded through the New Jersey State Scholarship Program. An additional $19.4 million was provided in grants from colleges and universities, corporations, foundations and civic organizations, and the federal government. The remaining $310 million — 92 percent of the minimum cost — was provided by students and their families. On the basis of a formula of expected family contribution, computed by the College Entrance Examination Board, this figure was $63 million above what families could realistically be expected to contribute. Of the $310 million which families contributed, students and their families borrowed $28.9 million through the State Guaranteed Loan Program, the National Defense Student Loans, and other loan programs.

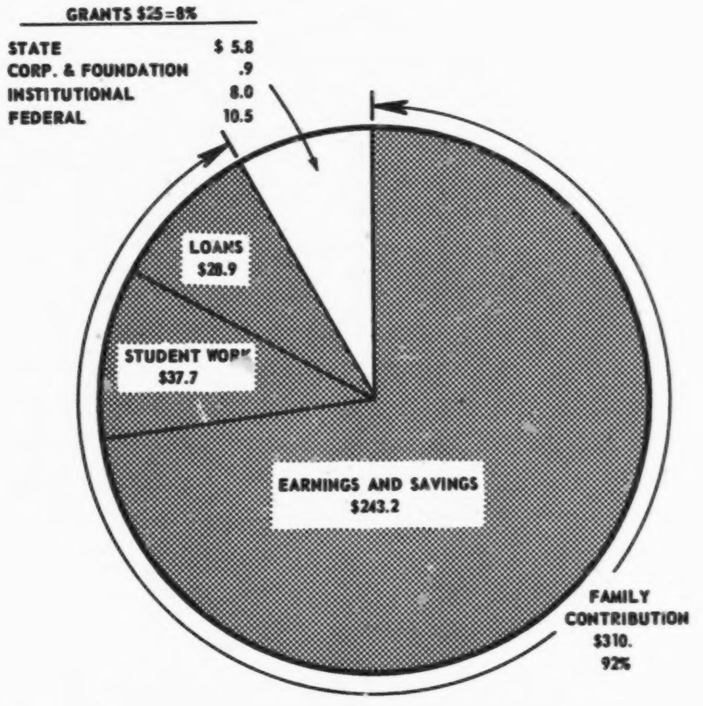
Although inadequate to meet the needs of New Jersey students, a variety of financial aid programs are available. These include grants available through state, federal, and private programs, various loan programs, and student work programs sponsored by the federal government and individual institutions (see Fig. 18). The funds for most of the grant programs are awarded to students in middle or low income brackets, and many of the scholarship grants are made only to high achievers.

Five major financial aid programs are now provided by New Jersey — one loan program and four grant programs.

The State Guaranteed Loan Program is one of the largest in the nation. In the academic year 1967-1968 undergraduate students borrowed some $22.5 million through this program. In 1968-1969 the total of new loans rose more than 50 percent to $35.5 million. Participation is significant; twenty-four percent of New Jersey students were aided through state guaranteed loans as compared to a national average of thirteen percent. The average amount per loan was $978 — $108 more than the average nationally. The combination of more students borrowing and higher amounts loaned per student results in an average loan per New Jersey student more than double the United States average.

FIGURE 17
FINANCING OF MINIMUM COST OF
COLLEGE ATTENDANCE IN NEW JERSEY
1967

(DOLLARS IN MILLIONS)



TOTAL = $335.

SOURCE: "Meeting the College Costs of New Jersey Students – The State's Role", Robert Heller Associates, Report to New Jersey State Scholarship Commision 1969.

The four major grant programs are the New Jersey State Competitive Scholarship Program, the Educational Opportunity Fund Program, the Tuition Aid Grant Program, and the County College Awards Program. In the academic year 1968-1969 the New Jersey State Competitive Scholarship Program awarded approximately $7.2 million in grants to New Jersey residents attending public and private colleges in and out of the state; the average grant was approximately $435. The State Scholarship program actually embodies two programs, a Competitive Scholarship Program and an Incentive Grant Program. Under the Competitive Scholarship Program, students are awarded grants of $500 or the cost of tuition, whichever is less. Under the Incentive Grant Program, students are awarded additional grants of between $100 and $500 to meet the higher costs of private institutions in the state. For the most part, recipients of awards were in the upper half of their high school graduating class and had family incomes below $7,500.

The Educational Opportunity Fund (EOF) began operation in the academic year 1968-1969 and is designed to aid the lower income student with potential ability who previously might not have attended college. In its first year of operation, the program made awards to 1,633 students attending 35 different New Jersey institutions. The total amount of direct financial aid for students was approximately $1.5 million and the average grant was $771.

The third grant program, the Tuition Aid Grants Program, began operation in the academic year 1969-1970 with funds totaling $1 million. The Tuition Aid Grant Program is designed to aid students attending New Jersey private institutions who are not eligible under the New Jersey State Competitive Scholarship Program because of academic or financial considerations.

Another recently instituted grant program, the County College Awards Program, also began operation in the academic year 1969-1970 with funds totaling $250,000. These funds will be used for New Jersey county college graduates transferring to four-year institutions who need financial assistance. Awards will range from $500 to $1,000.

FIGURE 18
TYPES OF FINANCIAL AID AVAILABLE TO NEW JERSEY STUDENTS IN 1967

PROGRAM	Total Amount to New Jersey Students 1967 (Millions)	STUDENTS ELIGIBLE	
		High School Class Standing	Approximate Family Income
GRANTS			
Federal:			
Educational Opportunity Grants	$3.5	Top Half	Under $6,000
Veterans Administration	6.6	*	*
Training Grants and Fellowships	0.4	*	*
Institutional	8.0	Top Quarter	Under $15,000
Corporate, Foundation, and Other Private	0.9	Top Quarter	Under $15,000
State:			
Basic and Incentive Program	5.8	Top Half	Under $ 7,500
Miscellaneous State Programs	0.1	*	*
Educational Opportunity Fund	**	No Limitation	Under $ 6,000
Tuition Aid Grants	**	No Limitation	Under $12,000
County College Awards	**	No Limitation	N. A.
LOANS			
National Defense Student Loans	5.1	Top Half	Under $ 7,500
State Guaranteed Loans	22.5	No Limitation	Under $15,000
Institutional Loans	0.8	No Limitation	Under $10,000
Miscellaneous Federal Loans	0.5	*	*
WORK			
Federal Work Study	3.3	No Limitation	Under $ 7,500
Institutional	6.6	No Limitation	No Limitation

**Categorical programs – available to veterans, war orphans, Cuban refugees, nurses, etc., generally without regard to academic or income level.*

***Not existing in 1967.*

Chapter IV E

LIBRARY RESOURCES

College libraries are a vital dimension of higher education. A library is an extension of the curriculum, a teaching tool for the faculty, and a ready source of information for the entire college and university community. The library must reflect and support the educational purposes of the institution and the interests of its faculty and students.

LIBRARY EFFECTIVENESS

Given its importance, the library must be effective in fulfilling its vital role. Unfortunately, effectiveness is neither easily defined nor measured, and criteria for effectiveness differ from institution to institution.

The major available statistical measures of effectiveness are national library rankings. These show that New Jersey's college libraries (taking all institutions together, both public and private) rank twelfth among the states in number of volumes and eleventh in total operating expenses. In contrast, the state ranks tenth in number of students. On a unit basis, New Jersey libraries rank twenty-sixth in number of volumes per student and twenty-ninth in expenditures per student.[27]

Although New Jersey does not compare unfavorably with other states on the basis of these statistics, there are other factors which must be considered in evaluating the effectiveness of a state's library resources. For example, the number, type, and age of the higher education institutions in a state significantly affect its national standing.

Another consideration which reduces the significance of the rankings is the relative numbers of undergraduate to graduate and commuting to resident students. Graduate students must have access to more comprehensive libraries than undergraduates. Also, a system with large numbers of commuting and extension students needs proportionately more copies of volumes to meet a higher circulation demand.

---

[27] Computed from *Library Statistics of Colleges and Universities, 1963-4, Analytic Report,* Theodore Samore, Table F - State Totals of Volumes, Personnel, and Operating Expenditures in Institutions of Higher Education: Aggregate United States 63-64.

Finally, rankings do not reflect availability and accessibility — can students and faculty get the volumes they want readily, either at their own library or through another in the system? A library may have a large collection yet be deficient in materials related to the college's curriculum. It may have an adequate collection which is not really accessible due to an inefficient or understaffed processing and circulation system. A library may have considerable materials but too few professional librarians, or a staff so overloaded with clerical work that it cannot provide the assistance needed by faculty and students. Presently there is no universally accepted way to evaluate library service.

Nevertheless, although there is not an exact correlation between service and size of holdings, adequate holdings and staff are the basis on which an effective service capacity can be developed.

Continuous expansion of holdings is necessary to keep up with the growth of publications as well as to improve the depth of the collection. Expansion is also necessary as a college offers new curricula. This is especially important for the state colleges, which are in the process of building comprehensive liberal arts libraries. New Jersey's needs in library facilities are particularly acute at this time because of the establishment of the many new public two-year colleges, the two new state colleges, and the expansion of Rutgers, The State University.

NEW JERSEY HIGHER EDUCATION LIBRARIES

An examination of the libraries of the New Jersey institutions indicates wide differences in their purposes and size.

Of the seventy-one university research libraries in the United States, two are in New Jersey — Princeton and Rutgers. The importance of the library in these research-oriented institutions is emphasized by Cartter in his *"An Assessment of Quality in Graduate Education." The Library is the heart of the university; no other single nonhuman factor is as closely related to the quality of graduate education . . . . Institutions that are strong in all areas invariably have major national research libraries.*

According to the statistics of the Association of Research Libraries for 1966-1967, the Princeton University Library, with over 2 million volumes, ranks thirteenth among all public and private university research libraries in number of volumes held. The Rutgers University Library, with over 1 million volumes, is the twenty-seventh largest research library. It is an entire library system in itself, comprising twenty-two distinct library units. Fairleigh Dickinson University, Drew University and Seton Hall University, which are not considered university research libraries, have between 100,000 and 310,000 volumes in their collections.

Each of the six state colleges has between 100,000 and 150,000 volumes in its collection. As a first step toward meeting its commitment to develop a comprehensive arts and science collection at each state college library, the New Jersey Legislature in 1969 appropriated $110,000 in additional funds to each college for library development. The Department of Higher Education also provided funds to each state college for reclassifying its holdings from the Dewey decimal to the Library of Congress system. This reclassification is a prerequisite to automation in library service.

Nevertheless, based on any of several national formulas, these funds do not come near the cost of making up the present deficiencies of the state college libraries. According to a widely used formula (Clapp-Jordan), the volume deficiency at the state colleges ranges from 60,000 to over 100,000 volumes. According to the American Library Association (ALA) standards, the volume deficiency is estimated to be between 150,000 and 230,000.

The libraries of the independent four-year colleges in New Jersey reflect the purpose of the institutions, ranging from primarily religious education to liberal arts curricula. The size of these collections ranges between 25,000 and 150,000 volumes.

The Newark College of Engineering currently has 56,530 volumes in its new library. The College is making progress toward a capacity of 150,000 volumes as well as changing to a Library of Congress system of classification. The New Jersey College of Medicine and Dentistry library has also moved into new facilities, and it currently has 31,875 volumes. In the next few years, the college plans to reach a total of 100,000 volumes. Both the engineering and medical libraries are highly specialized and require many expensive books and periodicals, but there are no currently accepted national formulas with which to evaluate their size.

The two-year college libraries, both public and private, hold an average collection of 15,000 volumes. ALA standards, presently under revision, recommend that any two-year institution with up to 1,000 students should have a minimum of 20,000 volumes, with a much greater number if there is a multiplicity of programs. For each 500 students beyond 1,000, the ALA recommends 5,000 additional volumes.

INTER-LIBRARY COOPERATION

No matter how large an institution's library, it is impossible for it to have every material requested. Consequently, it is to the advantage of all institutions to share their resources to the extent they can without lessening their local service.

Various cooperative arrangements now exist among New Jersey higher education libraries, of which the following are a few examples. The state colleges have worked together to purchase and arrange commercial processing of library materials cooperatively. A master list of periodicals held at the New Jersey state colleges and Rutgers is being prepared by the Council of New Jersey State College and University Libraries. Newark College of Engineering and Rutgers at the Newark campus have had library exchange privileges for students and faculty for three years. NJCMD is a member of a cooperative group including most New York City medical libraries which gives access to any volume in member libraries through a TWX system. The New Jersey Collegiate Planning Secretariat, consisting of Jersey City, Montclair, Newark, and Paterson State Colleges, hopes to develop a plan for the sharing of library facilities; immediate plans call for reciprocal borrowing privileges for graduate students at each of the schools, an interlibrary truck delivery system for the exchange of materials, and the establishment of a TWX teletype network among college libraries to facilitate exchange of information. The Mid-Bergen Federation of Libraries, including both college and public libraries, has a truck delivery system five days a week; the Federation hopes to establish direct borrowing privileges among Paterson and Montclair State Colleges and Fairleigh Dickinson University. The New Jersey State Library also has an interlibrary loan program.

Cooperation among libraries will be of increasing importance in the years ahead. A major objective of the New Jersey system of higher education is to expand cooperative efforts among its libraries. No single library can afford to meet all demands put upon it. Only through cooperation will each institution be able to serve properly the needs of its students and faculty.

Chapter IV F

COMPUTER RESOURCES

Computing is now vital to higher education. It is needed in administration, instruction, and research. The President's Science Advisory Committee, in a recent report, suggests that colleges may soon spend more money on computing than on libraries.

A recent survey of thirty-two of New Jersey's colleges and universities shows that sixteen now have computers, while six others have installations planned. More than a third of these colleges have terminals on campus, and about half rent computer time from off-campus sources. Almost every college with an on-campus computer plans to use it for administrative purposes. Computers are used to a lesser extent for undergraduate instruction. However, at least a third of the schools polled offer extensive educational programs involving the computer. In eleven of the schools, students submit more than 1,000 computer runs per semester and in three schools, more than 10,000 computer runs per semester.

STATE COLLEGES

Glassboro, Jersey City, Newark, and Trenton State Colleges have IBM 1130 computers. These systems arrived in late 1968 and are now used for administration, teaching, and research. Usage has grown to the point where each of these computers is used almost a full shift, and students are offered courses dealing with computer fundamentals and basic programming.

Paterson and Montclair State Colleges are in the process of identifying institutional plans and goals as they relate to computing. These data should help the colleges determine their computer requirements. In the interim, these institutions are planning to use a remote terminal device (IBM 2780) which allows interaction with a large scale computer at another location. This particular terminal will read cards and transmit their content to the remote computer and print data being generated elsewhere. In both colleges, students will be offered computer science and programming classes in the 1969-1970 academic year.

RUTGERS, THE STATE UNIVERSITY

This year Rutgers University installed an IBM 360/67 computer which is now operating at least two full shifts each day for both teaching and research. This is a large-scale machine which operates both as a local computer and in a teleprocessing mode through terminals to users at a remote location. In addition, there are smaller general-purpose computers at the University Heights campus and at Rutgers-Newark. A specialized computer is used by the physics department to support research in projects such as bubble chamber analysis.

At Rutgers, the administrative work is done on a separate small-scale computer (IBM 360/30). The University operates almost two full shifts each day on this computer which assists in almost every aspect of University administration.

The University continues to expand its academic program and now offers a master's degree in computer science. Recent appointments to the faculty have added strength in the pure programming and "software" areas, and the University seems certain to enhance its already notable reputation in this field.

NEWARK COLLEGE OF ENGINEERING

Newark College of Engineering is also developing an impressive computer science program. The college has just replaced a small-scale RCA Spectra 70/35 with a medium-scale Spectra 70/45. This machine now operates as both a local computer and through terminals as a processor which services users remotely. Terminals are being placed around the campus in order to make the computer more immediately available to faculty and students.

In addition to the growing number of undergraduate and graduate courses in computing, NCE students are developing programs which have national interest. Each undergraduate student is required to take a one-semester course in computer science and uses the computer in junior and senior courses. A major in computer science is offered at both the undergraduate and the graduate levels.

NEW JERSEY COLLEGE OF MEDICINE AND DENTISTRY

The College of Medicine and Dentistry has a small-scale computer (IBM 360/20) which is almost exclusively oriented to administration. However, the effective administration of this type of institution involves computer processes which are highly interactive with research and hospital operation. These needs demand a large-scale computer. The college has just completed a study of its computing requirements and is evaluating that effort preparatory to acquiring additional computer services. In the interim, some faculty research projects are conducted through purchased service, including a time-sharing terminal at the college.

INDEPENDENT COLLEGES

Some of New Jersey's independent colleges and universities as yet offer no computing services, while others offer some of the most significant services in the world. Many of the private colleges are small and do not have any computer resources available to either the faculty or the students. A few of these smaller colleges have limited funds allowing them to purchase a small amount of computer service from private sources. Most of the colleges desire to acquire and use computer services but are restricted by the cost.

At the other end of the spectrum, Princeton University has just installed one of the largest computers in the world. The IBM 360/91 is used for both education and research. This system operates as a central facility with terminals in buildings throughout the university.

One of the more significant computer science programs is found at Stevens Institute of Technology, where students are offered a wide variety of classes and also write programs which are widely distributed. Stevens has acquired a large-scale, time-sharing system.

COMMUNITY COLLEGES

All but five of the state's public community colleges have computer installations. Of the five which do not, three are new institutions; all five, however, have plans to acquire a computer.

The community colleges use computers for both academic and administrative purposes. Several of these institutions offer associate degrees in computer science, programming, or related subjects.

Community college computing classes generally have a pragmatic orientation with a strong emphasis on developing skills now in demand — especially in administration programming and management. The program at Mercer County Community College is an example of this type of computer program. Middlesex Community College offers a program which endeavors to build a strong understanding of the nature and character of computer languages as well as how to apply them. Ocean County College offers an even more varied program, with most of its computing classes in a computer-terminal-oriented environment in which students interact with computers in Northern New Jersey. Ocean County College is moving rapidly to offer computer-aided instruction as an adjunct to many classes not explicitly concerned with computers.

NETWORKS AND COLLABORATION

The institutions of higher education in New Jersey have formed a joint computer facility-the New Jersey Educational Computing Center (ECC).

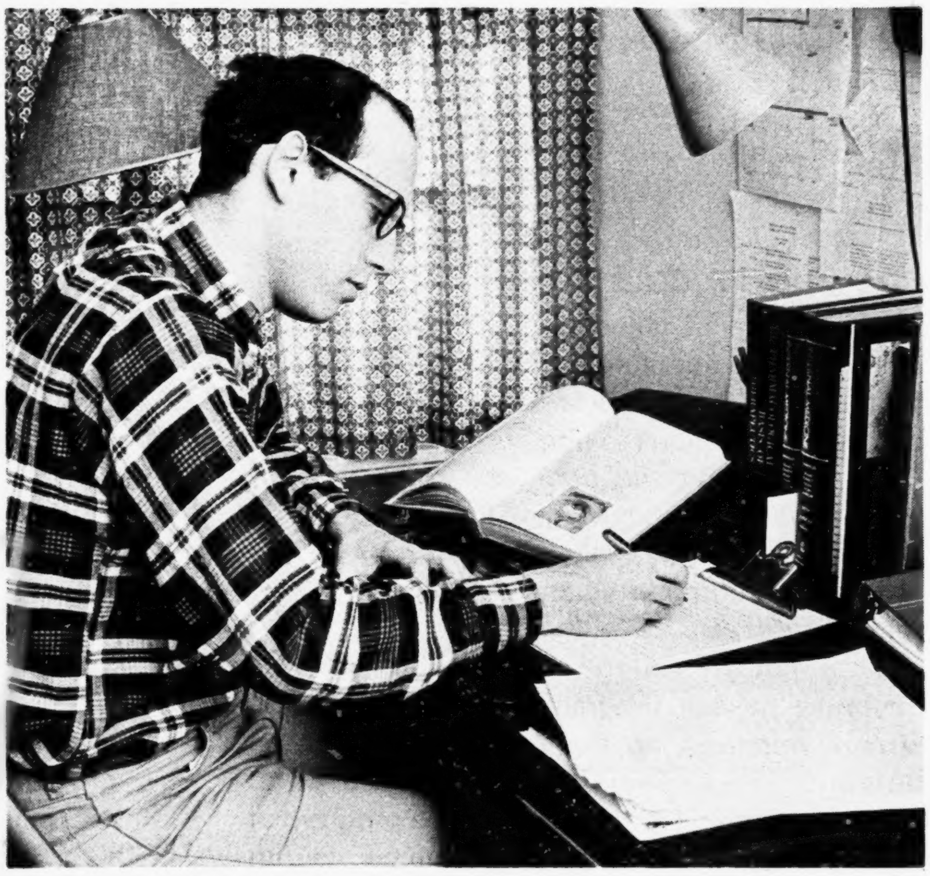
The ECC is planned to be a corporate entity independent of any particular institution. It is responsible to its Board of Directors and functions independently, free of control from any sponsoring institution other than through that institution's representative on the ECC Board.

The purposes of the ECC are (1) to provide computer power and services to New Jersey institutions of higher education, both public and private, which choose to become participants, and (2) to encourage the development of computing in higher education. The ECC will offer computation facilities and services otherwise unavailable to or too costly for institutions operating alone. In the long run, the ECC will offer all institutions the flexibility and economy provided by large computing facilities, as well as the opportunity to collaborate in the use of even more powerful computers a decade or so in the future. In addition, the educational and administrative services program of the ECC will greatly assist New Jersey's educational institutions in the development of their programs both for using computers and for educating students in this new and important field.

The establishment of the ECC as a corporate entity will require a few months to accumulate operating experience and to work out the details of the corporate charter. As a first step leading towards the establishment of the ECC, Rutgers University and the Department of Higher Education as the representative of New Jersey's colleges and universities have established an interim ECC which is now in operation and is governed by a Board of Directors selected from New Jersey's colleges and universities.

Dr. Otto Mauke, President of Camden County College, has been elected Chairman of the Board of Directors.

Princeton and Rutgers Universities have also entered into an arrangement whereby computers at the two campuses are connected through telephone lines. This arrangement allows the sharing of services between the universities and the ECC. During these interchange periods, Princeton's computer operates as one of the largest batch processers in the world and the Rutgers computer operates as a very large time-sharing system. As a result, all participating institutions have access to very powerful and widely differing forms of computer service with no appreciable cost increase.



Chapter IV G

INSTITUTIONAL COOPERATION

A recent trend within the system of higher education in New Jersey is the emergence of institutional cooperation. Limited financial resources and the high cost of educational facilities have fostered the growth of cooperative programs among New Jersey institutions.

Many colleges and universities in the state have explored the possibility of cooperating with neighboring institutions, and a variety of programs have been inaugaurated. There are four specific areas in which institutional cooperation has developed: 1) sharing of facilities, 2) faculty sharing, 3) joint programs, and 4) articulation (i.e., resolving the problems of transition from two-year to four-year programs and from four-year to graduate programs). In addition, joint institutional planning efforts, encompassing a wide range of college activities and cooperative research programs, have also been initiated.

The material which follows is not meant to be a comprehensive description of all cooperative efforts now underway within the New Jersey system of higher education. It does provide an indication of the benefits of cooperation and of the possibilities for even greater collaboration in the years ahead.

SHARING OF FACILITIES

Institutional cooperation in this area has focused on the use of libraries, computers, and other specialized campus facilities.

Many New Jersey colleges and universities have discussed potential institutional cooperation in the use of libraries, and a number of joint usage and exchange programs have already been established. The North Jersey College Consortium, consisting of Felician College, Englewood Cliffs College, Tombrock College, Alphonsus College, and Salesian College, is considering library usage and exchange as a possible area of cooperation. Glassboro State College and Gloucester County College have agreed to give extra copies of volumes in their collections to each other's libraries.

As part of an overall library planning effort, Rutgers-Newark, Newark College of Engineering, the New Jersey College of Medicine and Denistry, and Essex Community College have agreed to institute an identical indexing system for their libraries in order to facilitate joint usage. These institutions also plan to build different specialized collections which will be available for joint use.

The Council of New Jersey State and University Librarians was formed in 1967 to explore areas of cooperation in order to make library materials more accessible to students and faculty. One cooperative project being undertaken by the Council is the completion of a Union List of Periodicals of the state colleges and Rutgers University which will integrate the periodical holdings of each institution.

Institutional cooperation in the use of computer facilities has also been explored. The Department of Higher Education has helped to develop a statewide computer network. Eventually, the network will enable any institution in the New Jersey system to have access to a major computer center at little cost.

The six state colleges are instituting a computer-based student information and registration system on a cooperative basis. Each state college will share the cost of installing and maintaining the system. This will make the system available to all the colleges at a much lower expense than if each college were to install the system individually.

New Jersey institutions have been able to expand the scope of their course offerings through the joint use of facilities. For example, the facilities of Atlantic Community College have been made available to Rutgers-Camden for a training course for municipal officials, to the Rutgers Extension Division for real estate courses, and to Glassboro State College for professional education courses. The electrical technology laboratory of Middlesex County College has been used by the Department of Vocational-Technical Education of Rutgers for special summer classes for vocational teachers. The Sperry Observatory of Union College is made available to other institutions for laboratory work in astronomy and other educational activities.

FACULTY SHARING

Sharing of faculty enables colleges to offer courses which otherwise would not be available to their students, and thus broadens the scope of the college's academic programs. For example, a Rutgers faculty member developed a science curriculum for nonscience students for Westminster Choir College and taught the course as well.

The music departments of three state colleges, Jersey City, Montclair and Paterson, share two music faculty members. One of these faculty members also directs the New Jersey Percussion Ensemble made up of students from Jersey City and Paterson State Colleges and Rutgers-Newark.

Bloomfield and Upsala Colleges have established a faculty-sharing arrangement in the field of classical languages. Jersey City, Montclair, Newark, and Paterson State Colleges plan to organize a Center for Multinational Studies based upon faculty exchange and sharing arrangements. Villa Walsh, Salesian, Don Bosco, and Assumption Colleges also have instituted some faculty-sharing arrangements.

Another type of faculty sharing is jointly sponsored internship programs which provide in-service training for graduate students. Students enrolled in a master's degree program in food service and nutrition at the Rutgers College of Agriculture teach courses in hotel and restaurant management at Middlesex County College. In cooperation with the School of Education of Seton Hall University, Union College has established an internship program for graduate students in counseling.

JOINT PROGRAMS

New Jersey colleges and universities have expanded their curricula through the sponsorship of joint programs. A number of such programs have already been established, particularly in the areas of education and health services.

Jersey City State College, Montclair State College, and Seton Hall University sponsor a two-year summer program in urban school psychology leading to an M.A. degree and a professional certificate in school psychology. St. Peter's College and Jersey City State College jointly offer a training course for teacher aides for Jersey City public schools.

The Center for Multinational Studies established by the North Jersey Planning Secretariat (Montclair, Jersey City, Paterson, and Newark State Colleges) intends to develop a joint curriculum for international and multinational studies at the undergraduate and graduate levels.

These colleges are also giving consideration to instituting joint graduate degree programs in mathematics and psychology.

A marine science consortium has been established which will offer programs in marine science to students from participating colleges. Many of the two-year community colleges have affiliated with nearby medical facilities in order to offer joint nursing and health technology programs.

ARTICULATION

The major current problem of articulation arises from the growing number of two-year college graduates who are seeking admission to four-year colleges and universities. This has pointed up the need for special cooperation between the two- and four-year institutions and the need for an increasing number of places for two-year college graduates transferring to four-year colleges. The Board of Higher Education has encouraged planning efforts by the two-year community colleges and the four-year public colleges, resulting in the placement of all two-year transfer graduates in one of the public four-year institutions. Representatives of interested private institutions were also included in the conference.

Joint discussions about articulation have also pointed to the need to coordinate the structure and sequence of the academic programs at the two-year and four-year colleges. The presidents, deans, admissions officers, and transfer counselors of Bergen, Morris, and Essex County Colleges and Paterson, Jersey City, and Montclair State Colleges have met to talk about the nature of their curricula and course offerings in relation to articulation. Stevens Institute of Technology has also participated in the articulation discussions between the community colleges and the four-year colleges with particular emphasis on transfer students in prescience and preengineering programs. Representatives from Rutgers-Newark, Newark College of Engineering, and Essex Community College have formed a subcommittee of the Cooperative Central Planning Group of Public Higher Education in Newark to consider the problems of coordinating two-year academic programs.

INSTITUTIONAL PLANNING

Increasingly, the benefits to be derived from relating the individual planning efforts of New Jersey colleges to cooperative institutional planning are being explored. Cooperation in educational planning involves a broad range of institutional activities and faculty. Joint coordination of academic or occupational programs are considered within the framework of cooperative planning. Cooperative planning groups also function to stimulate the development of new ways in which institutions can cooperate to their mutual benefit. Three groups which have been set up on a cooperative basis to deal with institutional planning are the North Jersey Collegiate Planning Secretariat, the North Jersey Private College Consortium, and the Cooperative Central Planning Group of Public Higher Education in Newark.

The North Jersey Collegiate Planning Secretariat, consisting of Paterson, Jersey City, Montclair, and Newark State Colleges, has as its overall aims:

—to identify planning priorities

—to identify program areas where consortium arrangements would be logical

—to identify and bring together faculty and others who would be willing to work on consortium planning committees

—to relate the output of the consortium planning committees to the institutional planning process at each college

—to act as a technical resource for consortium study groups

—to act as a resource group for program development at public and independent colleges that might become concerned with similar issues.

The North Jersey Private College Consortium, consisting of Alphonsus College, Englewood Cliffs College, Felician College, Tombrock College, and Salesian College is considering a variety of areas in which cooperation is possible, including libraries and other facilities, faculty sharing, and program offerings.

The Central Planning Group of Public Higher Education in Newark, consisting of Rutgers-Newark, Newark College of Engineering, Essex Community College, and the New Jersey College of Medicine and Dentistry, has set up a task force on institutional planning made up of representatives from each institution. It also has task forces on libraries, nursing education, and articulation. This group is establishing a staff to support its cooperative work. It also has plans to construct facilities which will be cooperatively used.

COOPERATIVE RESEARCH

A variety of cooperative research programs are being carried out by New Jersey institutions. For example, Glassboro, Montclair, Jersey City, Paterson, Newark, and Trenton State Colleges and Monmouth, Caldwell, and Upsala Colleges have formed the Educational Research Consortium of New Jersey Colleges and have received federal funds to conduct educational research projects. St. Peter's College and Jersey City State College have established the Center for Urban Improvement which will study urban problems. Faculty members from Stevens Institute of Technology and the New Jersey College of Medicine and Dentistry are working together on research in the areas of biochemistry, polymers, and medical electronics.

CONCLUSION

Institutional cooperation is a way for colleges and universities to increase the resources available to each institution and promote their mutual welfare. Although important steps have been taken, the benefits of cooperation have only begun to be tapped. The development of the New Jersey system of higher education is facilitating such cooperation. In the future, New Jersey can look forward to greatly increased cooperation among the colleges and universities which make up the system.

Appendix A

TOTAL DEGREES AWARDED BY PROGRAM AND LEVEL JULY 1968 – JUNE 1969

	PhD	Masters	1st Prof.	Bachelors	Associate	TOTAL
Architecture		4		19		23
Biol. Sci.	70	76		726	75	947
Bus. & Comm.		526		2,341	502	3,369
Computer & Data		21			14	35
Spec. Teach.		735		1,614		2,349
Gen. Teach.		476		3,087	182	3,745
Educ. Non-Teach.	31	823		9		863
Engineering	90	473		1,422	135	2,120
English & Journalism	18	195		1,267		1,480
Fine & Appl. Arts	7	59		304	29	399
Foreign Lang. & Lit.	34	82		590		706
Nursing		10		249	170	429
Medicine			70			70
Dentistry			80			80
Other Health	5	36		93	70	204
Home Economics		1		65	3	69
Law			318			318
Library Sci.	1	176			5	182
Math.	34	177		661	16	888
Philosophy	7	3		119		129
Physical Sci.	103	180		469	21	773
Psychology	11	71		560		642
Religion	31	112	184	79	63	469
Soc. Sci.	46	414		2,890	26	3,376
Broad Gen.	2	51		290	1,659	2,002
Other	20	38		180		238
Total	510	4,739	652	17,034	2,970	25,905

Appendix B

DEGREES AND OTHER FORMAL AWARDS CONFERRED
JULY 1968 – JUNE 1969

TWO-YEAR INSTITUTIONS ASSOCIATE DEGREES	Atlantic Community	Camden County	Cumberland County	Mercer County	Middlesex County	Ocean County	Alphonsus	Assumption	Centenary	Englewood Cliffs	Luther	Mount St. Mary	Salesian	St. Joseph's	Tombrock	Union	Villa Walsh
Architecture																	
Biol. Science										75							
Bus. & Comm.	20	46	32	59	134				60		1						
Computer & Data						14											
Spec. Teaching																	
Gen. Teaching	63						29		15	75							
Educ. Non Teach.																	
Engineering		9	12	47	36	11											
Eng. & Jour.																	
Fine & Appl. Arts									9	20							
Foreign Lang. & Lit.																	
Other Health Prof.		2		1	25				7(1*)								
Nursing	18		13		56	24											
Home Ec.									3								
Law																	
Library Sci.										5							
Math	16																
Philos.																	
Physical Sci.							1									20	
Psychology																	
Religion										25	22			14			
Soc. Sci.	26																
Broad Gen.	16	4	40	202	160	139		25	64	35		16	22		54	139	12
Other																	
Total	159	61	97	309	411	188	30	25	158(1*)	235	23	16	22	14	54	159	12

*Bacculaureate Degree

Appendix B
DEGREES AND OTHER FORMAL AWARDS CONFERRED
JULY 1968 – JUNE 1969

FOUR-YEAR INSTITUTIONS ASSOCIATE & BACCALAUREATE	Glassboro	Jersey City	Montclair	N.C.E.	Newark	Paterson	Rutgers		Trenton	Alma White		Bloomfield	Caldwell	Don Bosco	Drew	Fairleigh	Dickinson	Felician		Georgian Court	Monmouth		Northeastern	Collegiate	Princeton	Rider		Seton Hall	Stevens	St. Elizabeth	St. Peter's	Upsala	Westminster
	B	B	B	B	B	B	A	B	B	A	B	B	B	B	B	A	B	A	B	B	A	B	A	B	B	A	B	B	B	B	B	B	B
Architecture																									19								
Biol. Science						25		268				19	10		25		153			5		25			66		15	40		15	41	19	
Bus. & Comm.								375				57	5			17	717			3	32	201				101	486	267		4	183	43	
Computer & Data																																	
Spec. Teaching	145	263	388		188	134		42	278		1		9							7		24					63	30		7			35
Gen. Teaching	519	405			575	500			327								264		25	46		187						190		36	13		
Educ. Non Teach.								9																									
Engineering				659				244								16	199				4	22			109				189				
Eng. & Jour.	46	46	91		27	43		286	52			34	57		30		163			26		35			93		66	81		17	15	59	
Fine & Appl. Arts			21			14		96	12				5		12		15			8		19		4	18		6			10	1	16	47
Foreign Lang. & Lit.			122					177				9	19		15		39			19		21			39		23	56		11	11	29	
Other Health Prof.								59								34	33				1												
Nursing	12*	9*						37	55*							34	53	25										83					
Home Economics								43																						22			
Law																																	
Library Sci.																																	
Math	21	45	85		50	24		140	32			7	22		6		72			16		5			30		6	36		11	37	16	
Philos.								25				3		31	9		7								26		1	8		2	4	3	
Physical Sci.					34	3		126				6	4		7		104			4		13			40		2	34	55	3	24	10	
Psychology								224	19			10			20		130					28			23		20	42			7	37	
Religion								4		1		2			10								1	32	26						4	1	
Social Sci.	36	49	97		24	39		968	45		4	63	65		99		333			32		74			276		136	249		37	162	102	
Broad Gen.	20	48	76				47	78	19		1					156**					525					3	3	23			22		
Other								169																	7							4	
TOTAL:	799	865	880	659	898	782	47	3,370	839	1	6	210	196	31	233	257	2,282	25	25	166	562	654	1	36	772	104	827	1,139	244	175	524	339	82

*School Nursing

** Edward Williams College

Appendix B

DEGREES AND OTHER FORMAL AWARDS CONFERRED JULY 1968 – JUNE 1969

MASTERS & Ph.D DEGREES	Glassboro	Jersey City	Montclair	N.C.E.		Newark	NJCMD		Paterson	Rutgers		Trenton	Drew		Fairleigh Dickinson	Monmouth	Princeton		Princeton Theol.		Rider	Seton Hall		Stevens		St. Michael's
	Ma.	Ma.	Ma.	Ma.	Ph.D	Ma.	Ma.	Ph.D	Ma.	Ma.	Ph.D	Ma.	Ma.	Ph.D	Ma.	Ma.	Ma.	Ph.D	Ma.	Ph.D	Ma.	Ma.	Ph.D	Ma.	Ph.D	Ma.
Architecture																	4									
Biol. Sci.								2		46	57				18		7	11				5				
Bus. & Comm.										177					261							88				
Computer & Data										3														18		
Spec. Teaching	68	88	124			131			43	17		190									27	47				
Gen. Teaching	25	35				65			80	67		81			44	10						69				
Educ. Non Teach.	89	17	79			219			19	118	31	22									10	250				
Engineering				179	3					54	21						66	57						174	9	
Eng. & Jour.	11	9	25			20			57	6	5		1	1	35		6	12				25				
Fine & Appl. Arts			5			14				22							18	7								
Foreign Lang. & Lit.			5							32	9						32	25				13				
Other Health Prof.										24	5				12											
Nursing										6		4*														
Home Economics										1																
Law																										
Library Sci.	5									171	1															
Math.		10	12			13				64	19	5			7		16	9				7		43	6	
Philos.																	3	7								
Physical Sci.										39	29				46	5	45	57				10	8	35	9	
Psychology			4							18	9				44		5	2								
Religion													6	22			2	2	100	7						4
Social Sci.	16	8	26						29	183	23		1		34		75	23				42				
Broad Gen.	9	12	30											2												
Other	1									37	20															
TOTAL:	224	179	310	179	3	462		2	228	1,085	229	302	8	25	501	15	279	212	100	7	37	556	8	270	24	4

*School Nursing

Appendix B
DEGREES AND OTHER FORMAL AWARDS CONFERRED
JULY 1968 – JUNE 1969

FIRST PROFESSIONAL DEGREES	Drew	Fairleigh Dickinson	Immaculate Conception	N.B. Theol.	NJCMD	Princeton Theol.	Rutgers	Seton Hall	TOTAL
Dentistry D.D.S. or D.M.D.		46			34				80
Medicine M.D.					70				70
Law LL.B or J.D.							158	160	318
Theology B.D. or B. Th.	56		12	7		109			184
TOTALS:	56	46	12	7	104	109	158	160	652

Appendix C
FULL TIME & PART TIME ENROLLMENT BY PROGRAM AND LEVEL
1968 – 1969

	Ph D.		Masters		First Prof.		Bachelors		Associate		TOTAL	
	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.
Architecture	18		16				46				80	
Biol. Science	226	62	181	282			3,051	286			3,458	630
Bus. & Com.	18	141	247	1,545			6,596	9,360	3,558	1,865	10,419	12,911
Computer & Data		2	9	39				4	151	97	160	142
Spec. Teaching	23	54	151	2,347			6,942	1,797			7,116	4,198
Gen. Teaching	11	14	159	2,710			12,446	8,878	535	120	13,151	11,722
Educ. Non Teaching	80	341	175	3,048							255	3,389
Engineering	313	576	246	1,064			5,669	2,255	1,075	321	7,303	4,216
English & Jour.	118	81	89	289			3,339	1,444			3,546	1,814
Fine & Applied Art	49		74	189			1,231	140	123	19	1,477	348
For. Lang. & Lit.	141	85	157	254			2,009	86			2,307	425
Other Health			38	3			504	63	543	20	1,085	86
Nursing			15	2			863	824	229	695	1,573	1,055
Medicine					306						306	
Dentistry					388						388	
Home Economics			4	41			218	72	8		230	113
Law					783	441					783	441
Library Science	4	14	92	266			91	30		52	187	362
Math	115	118	146	403			2,134	659			2,395	1,180
Philosophy	31		14				374	51			419	51
Physical Science	348	153	207	483			1,645	759	127	16	2,327	1,411
Psychology	59	21	121	160			1,686	744			1,866	925
Religion	52	78	167	106	728	21	285	73	111	1	1,343	279
Social Science	334	222	471	688			7,753	2,442	364	25	8,922	3,377
Broad General		4	39	566			11,975	9,372	6,280	8,986	18,294	18,928
Other	68	41	113	55			904	152	684	461	1,769	709
Total	2,008	2,007	2,931	14,540	2,205	462	69,761	39,491	14,254	12,212	91,159	68,712

Note: *Data for Essex County College is not included because its not available by program.*

Appendix D
ENROLLMENT BY PROGRAM, INSTITUTION, AND LEVEL, 1968

TWO YEAR INSTITUTIONS PUBLIC	Atlantic		Bergen		Camden		Cumberland		Essex*		Gloucester		Mercer		Middlesex		Morris		Ocean		Somerset
	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.
Architecture																					
Biol. Science																					
Bus. & Comm.	241		343		503		188				58	15	508	55	568	16	195	113	208	76	117
Computer & Data											18	9					68	50	65	38	
Spec. Teaching																					
Gen. Teaching	319		146													30					
Educ. Non Teach.																					
Engineering	14		46		88		38				34	3	357	66	236		48	50	192	73	
Eng. & Jour.																					
Fine & Appl. Arts													88	19							
Foreign Lang. & Lit.																					
Other Health Prof.	14				28								29	2	142		23	9			
Nursing	58		53				51				58		97	4	172		72		67		
Home Economics																					
Library Sci.																					
Math.																					
Philos.																					
Physical Sci.													127	16							
Psychology																					
Religion																					
Social Sci.													364	25							
Broad Gen.	263	783	112	550	760	735	320	348			259	140		1,694	583	2,240	177	337	642	943	120
Other		108					285				7	33	222	59	117	46		125	31	28	
TOTAL:	909	891	700	550	1,379	735	882	348	2,518*	926*	434	200	1,792	1,940	1,818	2,332	583	684	1,205	1,158	237

*Essex County College data not available by program.

Appendix D

ENROLLMENT BY PROGRAM, INSTITUTION, AND LEVEL, 1968

TWO YEAR INSTITUTIONS PRIVATE	Alphonsus		Assumption		Centenary	Englewood Cliffs		Luther		Mount St. Mary		Salesian		St. Joseph's	Tombrock		Union		Villa Walsh	
	F.T.	P.T.	F.T.	P.T.	F.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.
Architecture																				
Biol. Sci.																				
Bus. & Comm.					125															
Computer & Data																				
Spec. Teaching																				
Gen. Teaching	17	12			43														10	78
Educ. Non Teach.																				
Engineering																				
Eng. & Jour.																				
Fine & Appl. Arts	5				30															
Foreign Lang. & Lit.																				
Other Health Prof.					23**															
Nursing	1																	93		
Home Economics					8															
Law																				
Library Sci.		52																		
Math.																				
Philos.																				
Physical Sci																				
Psychology																				
Religion								82	1					29						
Social Sci.																				
Broad Gen.	43		49	18	425	81	186			37	63	39	23				930	711		
Other					22															
TOTAL:	66	64	49	18	676	81	186	82	1	37	63	39	23	29	230*	59*	930	804	10	78

* Tombrock data not available by program.

** Includes 9 in their junior year.

Appendix D

ENROLLMENT BY PROGRAM, INSTITUTION, AND LEVEL, 1968

FOUR YEAR INSTITUTIONS PUBLIC	Glassboro		Jersey City		Montclair		Newark		Paterson		Trenton		N.C.E.		N.C.E. certification program	Rutgers	
	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	P.T.	F.T.	P.T.
Architecture																	
Biol. Sci.	30				199				113							1,084	13
Bus. & Comm.																437	3,869
Computer & Data																	
Spec. Teaching	1,066	280	526	760	1,891	39	789	271	650		1,375	119				146	288
Gen. Teaching	1,664	1,328	1,683	877			2,495	3,577	1,752	1,047	1,222	712					
Educ. Non Teach.																	
Engineering													2,732	1,049	833	1,174	1
Eng. & Jour.	224	9	17		400	233			157	65	47					695	634
Fine & Appl. Arts	77		4						96		69					255	15
Foreign Lang. & Lit.	87				684											511	3
Other Health Prof.																376	4
Nursing				202*					130		121	343*				200	7
Home Economics																127	71
Library Sci.	25						11		32	30	23						
Math.	142		12		494				119		24					372	396
Philos.																62	11
Physical Sci.					195				19							449	332
Psychology					38						98					517	474
Religion																7	2
Social Sci.	239	17	35		412	156			236	162	26					2,223	1,229
Broad Gen.	166	1,746	864	1,045	83		293		218	281	1,204	1,174	70	64		4,468	913
Other			93								32					779	5
TOTAL:	3,720	3,380	3,234	2,884	4,396	428	3,588	3,848	3,522	1,585	4,241	2,348	2,802	1,113	833	13,882	8,267

*School Nursing

Appendix D – ENROLLMENT BY

FOUR YEAR INSTITUTIONS PRIVATE	Alma White	Bloomfield		Caldwell		Don Bosco		Drew		Fairleigh Dickinson Assoc.		Fairleigh Dickinson Bacca.		Felician		Georgian Court		Monmouth Assoc.	
	Full Time	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Architecture																			
Biol. Science		56	3	29	3			53				528	199			10	4		
Bus. & Comm.		190	93	37	2					20	50	1,643	3,523					366	57
Computer & Data																			
Spec. Teaching	20											30	26			13			
Gen. Teaching				71	171							726	417	118	120	84	34		
Educ. Non Teaching																			
Engineering										3	119	376	1,050					19	10
Eng. & Jour.	47	78	13	104	26			53	1			348	222			50	16		
Fine & Appl. Arts				55	7			17				81	55			16	4		
Foreign Lang. & Lit.		26	1	55	4			20				116	33			33	4		
Other Health Prof.				3						230	4	125	59					24	5
Nursing		16								63	4	64	194	63	1			3	128
Home Ec.																			
Library Science																			
Math.	18	26	2	45	4			18				204	151			24	3		
Philos.		8	2			155	11	16				13	10						
Physical Sci.		10	12	13				10	1			170	300			7			
Psychology		38	2	22				28				352	187						
Religion		10	2					13											
Soc. Science	76	215	27	140	33			174	2			765	380			60	4		
Broad Gen.	29	336	262	13				750	39			650	2,011	34	4	302	5	1,440	112
Other					147														
TOTAL	190	1,009	419	587	397	155	11	1,152	43	316	177	6,191	8,817	215	125	599	74	1,852	312

PROGRAM, INSTITUTION, AND LEVEL, 1968

Monmouth		N. E. Collegiate		Princeton	Rider				Seton Hall		Shelton		Stevens Inst.	St. Elizabeth		St. Peter's		Upsala		Westminister Choir	
Bacca.					Assoc.		Bacca.														
Full Time	Part Time	Full Time	Part Time	Full Time	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time	Full Time	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
				46																	
94	26			125			68	3	205	17				76	1	269	1	112	16		
771	176				118	1,483	1,668	339	1,047	297				28		632	986	143	75		
																	4				
9	9						231	3			9									187	2
768	134						532		1,045	392	49			150	24	87	45				
79	154			223									1,060			25	1				
124	28			187			140	3	170	46	18			61	1	249	133	170	14		
113	27	14		32			57		109					30	1	7		47	10	152	21
62	14			65			31	1	116	19				38		86		79	7		
					30																
									269	77											
														91	1						
61	24			52			45		109	19	18			39		241	54	71	6		
8	1			57			9		17	8	3			9	1	12	5	5	2		
48	22			103			27		77	40			313	21		130	38	53	14		
148	23			36			72	1	158	40						48		131	17		
		172	67	47							20	1				11	1	5			
307	41			629			312	1	786	91	39			123	2	685	251	271	46		
3	9			1,665		103	185	40	221	755	23			79	124	92	597	227	303		
						62															
2,595	688	186	67	3,267	148	1,648	3,377	391	4,329	1,801	179	1	1,373	745	155	2,574	2,116	1,314	510	339	23

Appendix D

ENROLLMENT BY PROGRAM, INSTITUTION, AND LEVEL, 1968

FIRST YEAR GRADUATE PUBLIC	Glassboro	Jersey City		Montclair		N.C.E.		Newark		N.J.C.M.D.	Paterson		Rutgers		Trenton	
	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.
Architecture																
Biol. Science										6		58	116	100	2	40
Bus. & Comm.													153	507		
Computer Science													9	39		
Educ. Spec.	152	13	202	60	160			23	552		4	508	9	95	30	516
Educ. Gen.	333	6	267	4	139			3	263			658	18	170	19	364
Educ. Non Teach.	559	7	47	4	151			15	708			98	42	185	1	172
Engineering						46	474						70	87		
Eng. & Jour.				7	69						1	31	37	32		
Art – Fine & Applied				9	102						2	56	37	31		
Foreign Lang. & Lit.				3	43								63	115		
Nursing													15	2		
Other Health													38	3		
Home Economics				1	26								3	15		
Library Science	76												92	190		
Math.				2	76								70	102	1	40
Philosophy																
Phys. Science				5	71								105	81		30
Psychology				14	22								60	18		
Religion																
Social Science				5	76							124	314	137		50
Broad General		6	272													18
Other													103	55		
TOTAL:	1,120	32	788	114	935	46	474	41	1,523	6	7	1,533	1,354	1,964	53	1,230

Appendix D
ENROLLMENT BY PROGRAM, INSTITUTION, AND LEVEL, 1968

FIRST YEAR GRADUATE PRIVATE	Drew		Fairleigh Dickinson		Monmouth		N. B. Theological		Princeton	Princeton Theol.		Rider		Seton Hall		Stevens Inst.		St. Michael's Mon.	
	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.
Architecture									16										
Biol. Science			19	53					15					23	31				
Bus. & Comm.			71	762								2	123	21	153				
Computer Sci.																			
Educ. Spec.													99	12	63				
Educ. Gen.			30	11	6	76								73	429				
Educ. Non Teach.					4	153						1	65	101	910				
Engineering				118	1	39			94							35	346		
Eng. & Jour.	3		9	58	2	12			16					14	87				
Art – Fine & Applied									26										
Foreign Lang. & Lit.			5	14					48					38	82				
Nursing																			
Other Health																			
Home Economics																			
Library Science																			
Math.			6	33	1	17			29					7	28	30	107		
Philosophy									14										
Phys. Science			13	104	2	23			66					12	91	4	83		
Psychology			33	120					14										
Religion	4	8					36	3	9	80	95							38	
Social Science			14	78					109					29	223				
Broad General																33	276		
Other									10										
TOTAL	7	8	200	1,351	16	320	36	3	466	80	95	3	287	330	2,097	102	812	38	

Appendix D

ENROLLMENT BY PROGRAM, INSTITUTION, AND LEVEL, 1968

PhD or SECOND YEAR GRADUATE	Drew		N.C.E.		N.J.C.M.D.	Princeton		Princeton Theol.		Rutgers		Seton Hall		Stevens Inst.	
	F.T.	P.T.	F.T.	P.T.	F.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.
Architecture						18									
Biol. Science					2	47				177	62				
Bus. & Comm.												18	141		
Computer Sci.											2				
Educ. Spec.										13	54	10			
Educ. Gen.										11	14				
Educ. Non Teach.										59	333	21	8		
Engineering			50	275		161				64	53			38	248
Eng. & Jour.	3	4				35				80	77				
Art – Fine & Applied						47				2					
Foreign Lang. & Lit.						100				41	85				
Nursing															
Other Health															
Home Economics															
Library Science										4	14				
Math.						53				48	46			14	72
Philosophy						31									
Phys. Science						190				132	62	7	1	19	90
Psychology						18				41	21				
Religion	6	77				9		37	1						
Social Science	3	1				200				124	156	7	65		
Broad General		4													
Other						24				44	41				
TOTAL:	12	86	50	275	2	933		37	1	840	1,020	63	215	71	410

Appendix D
ENROLLMENT BY PROGRAM, INSTITUTION, and LEVEL
1968

FIRST PROFESSIONAL	Drew		Fairleigh Dickinson	Immaculate Conception	New Brunswick Theological		NJCMD	Princeton Theological		Rutgers		Seton Hall		TOTAL	
	F.T.	P.T.	F.T.	F.T.	F.T.	P.T.	F.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.
Dentistry			207				181							388	
Medicine							306							306	
Law										507	43	276	398	783	441
Theology	103	18		222	35	1		368	2					728	21
Total	103	18	207	222	35	1	487	368	2	507	43	276	398	2205	462

Appendix E

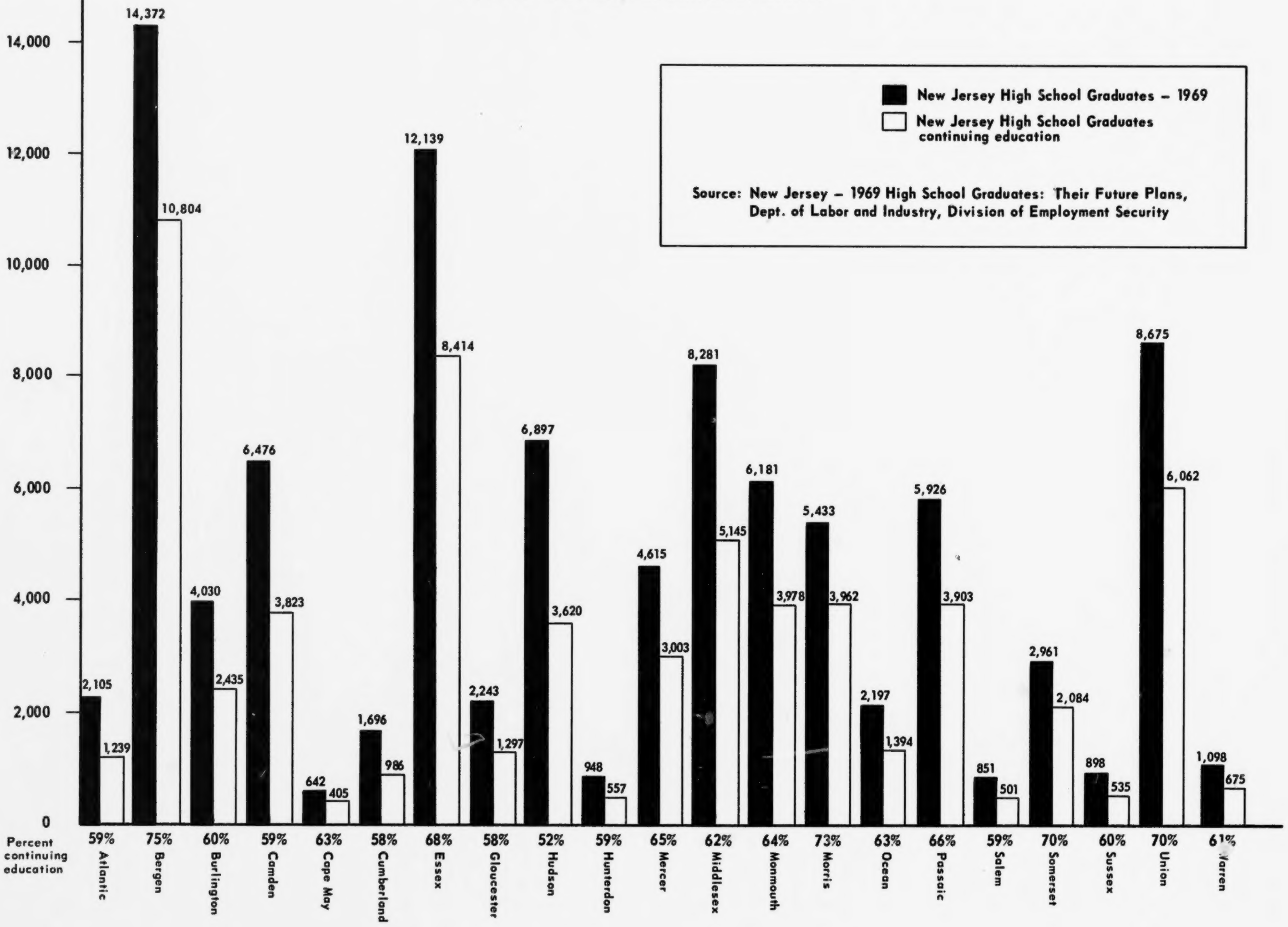
DISTRIBUTION OF 1968 HIGH SCHOOL GRADUATES BY TYPE OF POST-SECONDARY INSTITUTION ATTENDED

ITEM	NUMBER	PERCENT
4 Year College or University	40,790	43.7
Two Year College	10,295	11.0
Other Type College	379	.4
Sub-Total Attending College	(51,564)	(55.1)
Business or Secretarial School	2,807	3.0
Cosmetology or Barber School	871	.9
Art School	394	.4
Nursing School	1,442	1.5
Technical, Trade, or Vocational School	3,819	4.1
Other Post-Secondary School	496	.5
Sub-Total in Schools of Non-College Grade	(9,829)	(10.5)
Secondary Schools	281	.3
Apprenticeship Programs	301	.3
On-the-job Training Programs	214	.2
Sub-Total in Non-School Training	(515)	(.6)
TOTAL EDUCATION	62,089	66.5

SOURCE: Follow-Up of New Jersey High School Graduates – Class of 1968, N. J. Dept. of Education, Division of Curriculum and Instruction.

Appendix F

1969 N.J. HIGH SCHOOL GRADUATES GOING INTO POST-SECONDARY EDUCATION BY COUNTY



Source: New Jersey – 1969 High School Graduates: Their Future Plans, Dept. of Labor and Industry, Division of Employment Security

Appendix G

FULL-TIME AND PART-TIME ENROLLMENT BY LEVEL AND INSTITUTION 1968

INSTITUTION	Undergraduate		Graduate & Professional		Total
	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time
UNIVERSITIES AND PROFESSIONAL SCHOOLS					
Drew University	1,152	43	120	125	1,272
Fairleigh Dickinson University	6,141	8,994	292	2,247	6,433
Immaculate Conception Seminary*	220	0	–	–	220
Newark College of Engineering	2,802	1,113	96	749	2,898
New Brunswick Theological Seminary	–	–	36	3	36
N. J. C. M. D.	–	–	495	0	495
Princeton Theological Seminary	–	–	485	98	485
Princeton University	3,267	0	1,399	0	4,666
Rutgers, The State University	13,882	8,267	2,701	3,027	16,583
St. Michael's Monastery	–	–	38	0	38
Seton Hall University	4,329	1,801	669	2,710	4,998
Stevens Institute of Technology	1,373	0	104	686	1,477
SUBTOTAL	32,946	20,218	6,435	7,645	39,381
FOUR-YEAR COLLEGES					
Alma White	190	0	–	–	190
Bloomfield	1,009	419	–	–	1,009
Caldwell	587	397	–	–	587
Don Bosco	155	11	–	–	155
Felecian	215	125	–	–	215
Georgian Court	599	74	–	–	599
Glassboro	3,720	3,380	–	1,120	3,720
Jersey City	3,234	2,884	32	788	3,266
Monmouth	4,447	1,000	16	320	4,463
Montclair	4,396	428	114	935	4,510
Newark	3,588	3,848	41	1,523	3,629
Northeastern Collegiate	186	67	–	–	186
Paterson	3,522	1,585	7	1,533	3,529
Rider	3,525	2,039	19	607	3,544
College of St. Elizabeth	745	155	–	–	745
St. Peter's	2,574	2,116	–	–	2,574
Shelton	179	1	–	–	179
Upsala	1,314	510	–	–	1,314
Westminster	339	23	–	–	339
SUBTOTAL	34,744	19,062	229	6,826	34,973
TWO-YEAR COLLEGES					
Alphonsus	66	64	–	–	66
Assumption	49	18	–	–	49
Atlantic	909	891	–	–	909
Bergen	700	550	–	–	700
Camden	1,379	735	–	–	1,379
Centenery	676	0	–	–	676
Cumberland	882	348	–	–	882
Edward Williams	366	0	–	–	366
Englewood Cliffs	81	186	–	–	81
Essex	2,518	926	–	–	2,518
Gloucester	434	200	–	–	434
Luther	82	1	–	–	82
Mercer	1,792	1,940	–	–	1,792
Middlesex	1,818	2,332	–	–	1,818
Morris	583	684	–	–	583
Mt. Saint Mary	37	63	–	–	37
Ocean	1,205	1,158	–	–	1,205
Saint Joseph's	29	0	–	–	29
Salesian	39	23	–	–	39
Somerset	237	0	–	–	237
Tombrock	230	59	–	–	230
Union	930	804	–	–	930
Villa Walsh	10	78	–	–	10
SUB TOTAL	15,052	11,060	–	–	15,052
GRAND TOTAL	82,742	50,340	6,664	14,471	89,406

**Immaculate Conception Seminary offers a six year program, the first two, corresponding to the junior and senior years of college.*

SOURCE: 1968 Undergraduate Enrollment Survey, Department of Higher Education and
1968 Higher Education General Information Survey forms.

Appendix H

FULL-TIME UNDERGRADUATE ENROLLMENT BY INSTITUTION AND COUNTY

COUNTY:	Atlantic	Bergen	Burlington	Camden	Cape May	Cumberland	Essex	Gloucester	Hudson	Hunterdon	Mercer	Middlesex	Monmouth	Morris	Ocean	Passaic	Salem	Somerset	Sussex	Union	Warren
UNIVERSITIES AND PROFESSIONAL SCHOOLS																					
Drew University	–	68	8	17	–	4	47	3	11	5	18	29	24	77	2	26	2	31	9	69	2
Fairleigh Dickinson	42	2,215	29	39	13	30	628	15	392	21	38	158	83	359	34	632	6	70	24	363	22
Newark College of Engineering	10	404	7	14	4	7	645	5	294	12	26	267	88	172	24	304	1	58	10	385	13
Princeton University	3	73	15	18	2	1	76	6	15	7	59	20	28	32	3	9	1	15	–	41	4
Rutgers University	184	1,586	481	1,064	40	115	1,942	275	893	86	344	1,525	500	435	171	749	50	448	82	1,466	65
New Brunswick	(107)	(865)	(183)	(235)	(26)	(64)	(511)	(89)	(281)	(45)	(205)	(840)	(310)	(219)	(119)	(272)	(32)	(250)	(46)	(628)	(41)
Camden	(18)	(1)	(218)	(710)	(5)	(12)	(2)	(148)	–	–	(4)	–	(5)	–	(1)	–	(5)	–	–	–	–
Newark	(6)	(421)	(2)	(7)	–	(2)	(1,186)	(1)	(474)	(8)	(12)	(140)	(37)	(101)	(6)	(359)	–	(33)	(9)	(515)	(3)
Douglass	(53)	(289)	(73)	(100)	(9)	(36)	(225)	(37)	(113)	(32)	(122)	(540)	(144)	(113)	(44)	(109)	(12)	(155)	(26)	(311)	(21)
Rutgers University – College	–	(10)	(5)	(12)	–	(1)	(18)	–	(25)	(1)	(1)	(41)	(4)	(2)	(1)	(9)	(1)	(9)	(1)	(12)	–
Seton Hall	14	511	21	45	2	15	1,242	5	303	7	23	343	144	192	31	522	3	78	12	527	10
Stevens Institute of Technology	7	213	12	7	2	5	101	2	197	4	12	60	39	44	14	57	2	19	9	77	3
SUBTOTAL	261	5,063	645	1,212	64	177	4,573	321	1,736	133	495	2,710	917	2,242	307	2,050	68	758	143	3,650	325

Appendix H

FULL-TIME UNDERGRADUATE ENROLLMENT BY INSTITUTION BY COUNTY (Continued)

COUNTY:	Atlantic	Bergen	Burlington	Camden	Cape May	Cumberland	Essex	Gloucester	Hudson	Hunterdon	Mercer	Middlesex	Monmouth	Morris	Ocean	Passaic	Salem	Somerset	Sussex	Union	Warren
FOUR-YEAR COLLEGES:																					
Alma White	–	3	–	–	–	–	1	–	4	2	2	41	1	–	–	–	–	62	–	22	–
Bloomfield	4	87	5	7	2	1	388	4	38	4	14	44	14	59	5	96	2	15	13	102	10
Caldwell	–	90	1	2	–	1	196	1	30	–	6	39	24	37	3	51	–	8	10	43	1
Don Bosco	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	111	–	–
Felician	–	125	–	–	–	–	29	–	13	–	1	8	–	8	–	17	–	–	1	9	–
Georgian Court	16	40	9	14	2	3	24	5	10	1	18	54	71	12	101	13	–	23	–	29	9
Glassboro	234	264	215	707	63	243	114	595	36	28	87	245	205	109	97	89	95	73	20	148	42
Jersey City	1	373	4	7	1	–	267	2	2,192	2	3	118	60	23	8	50	3	5	4	109	1
Monmouth	62	308	29	105	15	31	324	9	101	19	58	366	1,745	75	203	92	4	61	7	340	37
Montclair	38	873	62	59	13	21	1,027	25	290	14	41	260	209	246	84	608	15	87	41	286	68
Newark	7	153	11	15	1	2	1,078	11	105	9	8	448	148	115	34	110	3	72	6	1,237	13
Northeastern Collegiate	1	17	–	2	–	1	34	–	4	6	1	7	4	10	2	18	–	9	2	7	1
Paterson	9	1,281	16	6	2	5	336	6	81	10	8	78	57	265	19	1,211	–	20	54	33	21
Rider	34	176	132	79	15	39	101	33	40	56	571	310	124	80	72	45	12	152	20	149	45
College of St. Elizabeth	4	50	6	13	2	2	97	2	39	4	13	30	23	128	5	25	3	22	3	63	6
St. Peters	–	322	–	1	–	–	175	–	1,533	–	1	65	71	14	9	55	–	10	1	129	–
Shelton	6	–	6	15	18	–	–	–	1	–	3	2	2	–	–	1	1	–	2	3	–
Trenton	105	334	260	233	30	80	218	50	105	85	767	607	336	171	145	124	25	167	38	250	88
Upsala	6	142	12	28	3	–	430	3	31	7	7	85	31	48	9	75	3	14	6	110	6
Westminster Choir	1	6	2	3	–	2	7	1	–	2	21	17	8	13	8	4	1	9	1	8	–
SUBTOTAL	528	4,644	770	1,296	167	431	4,906	747	4,653	249	1,630	2,824	3,079	1,413	804	2,684	167	809	340	2,927	348

Appendix H

FULL-TIME UNDERGRADUATE ENROLLMENT BY INSTITUTION BY COUNTY (Continued)

COUNTY	Atlantic	Bergen	Burlington	Camden	Cape May	Cumberland	Essex	Gloucester	Hudson	Hunterdon	Mercer	Middlesex	Monmouth	Morris	Ocean	Passaic	Salem	Somerset	Sussex	Union	Warren
TWO-YEAR COLLEGES																					
Alphonsus	–	54	–	–	–	–	3	–	–	–	–	–	–	–	–	1	–	–	–	–	–
Assumption	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	1
Atlantic	769	1	4	22	78	6	1	17	–	–	1	–	2	6	–	5	–	–	–	1	–
Bergen	–	677	–	–	–	–	–	–	5	–	–	–	–	–	–	13	–	–	–	–	–
Camden	4	–	88	1,173	1	–	–	89	–	–	–	–	–	–	–	–	–	–	–	–	–
Centenery	–	33	6	3	–	2	49	–	–	8	5	4	12	44	5	9	–	16	6	14	33
Cumberland	15	2	3	10	17	482	1	27	–	1	–	1	–	–	–	–	41	–	1	–	–
Edward Williams	Figures Included Under Fairleigh Dickinson																				
Englewood Cliffs	–	47	–	–	–	–	1	–	16	–	–	–	–	–	–	–	–	–	–	1	–
Essex	Data Not Available																				
Gloucester	–	–	4	19	1	4	–	377	–	–	–	–	–	–	–	–	6	–	–	–	–
Luther	–	7	–	1	–	–	–	–	3	–	–	–	2	2	–	8	–	–	–	3	1
Mercer	3	5	183	13	–	–	5	–	10	35	1,372	51	20	5	2	4	–	39	1	9	5
Middlesex	–	3	–	–	–	–	24	–	7	–	–	1,566	12	3	–	1	–	90	–	107	1
Morris	–	1	–	–	–	–	9	–	3	–	–	1	–	537	–	9	–	1	18	2	1
Mt. St. Mary	–	–	1	–	–	–	2	–	–	–	–	8	3	2	1	–	–	14	–	6	–
Ocean	–	4	1	–	–	–	8	–	2	–	–	1	82	1	1,098	2	–	1	–	5	–
St. Joseph's	–	–	–	1	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–
Salesian	Data Not Available																				
Somerset	–	–	–	–	–	–	–	–	–	3	1	1	–	–	–	–	–	229	–	3	–
Tombrock	Data Not Available																				
Union	–	15	–	–	–	–	73	–	12	2	1	35	4	16	1	23	–	16	1	728	2
Villa Walsh	–	–	–	–	–	–	–	–	–	–	2	1	1	–	–	–	–	–	–	–	–
SUBTOTAL	791	849	290	1,242	97	494	176	510	59	51	1,380	1,669	139	616	2,007	86	47	406	27	879	43
GRAND TOTAL	1,580	10,556	1,705	3,750	328	1,102	9,655	1,578	6,448	433	3,505	7,203	4,135	4,271	3,727	4,820	282	1,973	510	7,456	716

Source: 1968 Undergraduate Enrollment Survey, Dept. of Higher Education

APPENDIX I

MINORITY GROUP ENROLLMENT BY INSTITUTION

INSTITUTION	Total Enrollment	No. of Black Students	% of Black Students	No. of Spanish Surnamed Stud.	% of Spanish Surnamed Stud.
Atlantic Comm. College	918	78	8.5	NA	NA
Bergen Comm. College	724	11	1.5	6	.8
Caldwell College for Women	587	10	1.7	NA	NA
Camden County College	1,328	193	4.5	31	2.3
Centenary College for Women	676	0	0	NA	NA
College of St. Elizabeth	740	21	2.8	NA	NA
Cumberland County College	601	49	8.0	7	1.2
Drew University	1,195	19	1.6	NA	NA
Essex County College	2,265	728	32.0	30	1.3
Georgian Court College	599	11	1.8	NA	NA
Glassboro State College	3,680	151	4.1	5	.1
Gloucester County College	380	70	18.0	6	1.6
Jersey City State College	3,234	250	7.7	50	1.5
Mercer County Comm. College	1,790	303	17.0	20	1.1
Middlesex County College	1,818	43	2.3	14	.8
Monmouth College	5,447	65	1.2	NA	NA
Montclair State College	4,452	140	3.1	150	3.4
Morris County College	592	15	2.5	10	1.7
Newark College of Eng'g.	2,798	54	1.9	54	1.8
Newark State College	3,588	150	4.2	12	.3
Ocean County College	1,205	21	1.7	8	.7
Paterson State College	3,522	75	2.1	5	.1
Princeton University	3,301	95	2.9	NA	NA
Rider College	3,540	37	1.0	NA	NA
Rutgers, The State University	13,729	380	2.8	133	1.0
New Brunswick	(6,410)	(96)	(1.5)	(35)	(.5)
Camden	(1,151)	(21)	(1.8)	(10)	(.9)
Douglass	(2,806)	(115)	(4.1)	(19)	(.7)
Newark	(3,362)	(148)	(4.4)	(69)	(2.1)
St. Peter's College	2,580	64	2.5	NA	NA
Seton Hall University	3,918	102	2.6	NA	NA
Somerset County College	247	32	13.0	NA	NA
Stevens Institute of Tech.	1,373	8	.6	NA	NA
Trenton State College	4,591	146	3.2	97	2.1
Union College	1,734	35	2.0	NA	NA
Upsala College	1,360	59	4.3	NA	NA
TOTAL:	78,692	3,415	4.34	--	--
Public	51,642	2,889	5.59	*648	*1.25
Private	27,050	526	1.94	NA	NA

**Figures do not include Atlantic and Somerset County Community Colleges*

NA -- Not Available

SOURCES: Public Institutions: "Minority Group Students, Faculty, and Administrators of N.J. Public Institutions", Department of Higher Education Memorandum – April 23, 1969.

Private Institutions: "Federal Survey of Negro Undergraduate Enrollment"; Chronicle of Higher Education, April 21, 1969.

Appendix K

DESCRIPTIONS OF COLLEGES

SUMMARY

The following brief institutional descriptions are separated into groups according to the level of degrees which they are authorized to grant. Within each group the institutions are listed alphabetically. Each description attempts to answer five basic questions. First, what type of institution is the college and what are its major divisions? Second, where is it located? Third, what is the general history of the institution? Fourth, what kind of programs are offered? Fifth, what special attributes or programs of the college make it unique? Much information about programs and activities of each college has been omitted for the sake of brevity. Unless otherwise noted, data on enrollments has been taken from the 1969 Higher Education General Information Survey (HEGIS).

Two-Year Colleges

ALPHONSUS COLLEGE FOR WOMEN

Alphonsus College for Women is a two-year Catholic College. Opened in 1961 in Glen Cove, Long Island, the College is now located in Woodcliff Lake, New Jersey, in the northern part of the state. It is a recognized candidate for membership in the Middle States Association.

In 1969 the College enrolled 181 students of which 92 were full-time. Programs are offered leading to degrees in the following: Associate in Arts, Associate in Science, Associate in Applied Science (Child Care), and Associate in Applied Science (Library Assistantship). The College is a Recognized Candidate of the Middle States Association.

Alphonsus College offers both an evening and summer session. In the evening session courses for credit as well as non-credit lecture courses are offered. The summer session is opened to students from other institutions. Both sessions are coeducational.

ASSUMPTION COLLEGE FOR SISTERS

Assumption College is a two-year Catholic college for women located in Mendham, New Jersey, in Morris County. It is accredited by the Middle States Association. The earliest history of the college links it to what was originally designated the Mallinckrodt Novitiate School in 1927. In 1952 Assumption Junior College was added to the novitiate high school and eight years later the name was changed to Assumption College. The College is conducted by the Sisters of Christian Charity for religious women of all congregations, but primarily for its own members. The College currently enrolls 52 students of which approximately 80 percent are full-time students.

ATLANTIC COMMUNITY COLLEGE

Atlantic Community College is a two-year public college located in Mays Landing. The College opened its doors to students in September, 1966 using facilities of Atlantic City High School and moved to its permanent campus in Mays Landing in February, 1968. Atlantic Community College is a recognized candidate of the Middle States Association. The College currently enrolls 3,850 students, approximately one-half of whom are full-time students. The College conducts liberal arts and career oriented programs leading to the Associate in Arts and Associate in Science degrees. The College conducts a program of part-time courses including evening courses on both a degree and non-degree basis. In addition to its full-time and part-time programs of study, the College sponsors community service programs tailored to the particular needs of professional, industrial, commercial and special interest groups within Atlantic City. A day and evening summer session is conducted, and the College makes its facilities available for extension courses offered by other New Jersey colleges.

BERGEN COMMUNITY COLLEGE

Bergen Community College is a two year public college located in Paramus. It is a recognized candidate for the membership in the Middle States Association. The College registered its first class of day and evening students in September, 1968, beginning operations in temporary buildings on a portion of its permanent site. Construction of the new campus is scheduled to be completed in time for the Fall Semester, 1971. The College enrolled 3,241 students in 1969 over one-half of whom were part-time students. The College conducts liberal arts and career-oriented programs leading to the Associate in Arts and Associate in Applied Science degrees. Courses for matriculated and non-matriculated students as well as non-credit courses of a community-service nature are conducted in the Evening Division and Summer Session.

BROOKDALE COMMUNITY COLLEGE

Brookdale Community College, the county college of Monmouth, is a two-year public college in Lincroft. It is a correspondent of the Middle States Association. The College enrolled the first class under its own auspices during the Fall of 1969 after having provided education for county residents at Monmouth College during 1968-69. The College offers liberal arts and career-oriented programs leading to the A.A., A.S., and A.A.S. degrees. The College also offers diplomas for the completion of certain one and two-year programs and offers Certificates of Completion for shorter programs. In addition to the Lincroft campus, the College operates the Technical Institute in Middletown Township which offers one and two-year technology programs. Facilities at Monmouth Medical Center house the Allied Health Center of the college. The College also utilizes facilities throughout Monmouth County as Community Learning Centers to house special programs and courses.

BURLINGTON COUNTY COLLEGE

Burlington County College is a two-year public community college located in Pemberton. It is a correspondent of the Middle States Association. The College was officially founded in July, 1966, with the appointment of the first Board of Trustees. The College opened its doors in September, 1969, in temporary facilities while a permanent campus is being constructed for occupancy in September, 1970. The College will conduct college transfer and the two year career-oriented programs leading to the Associate in Arts, Associate in Science, and Associate in Applied Science degrees. Evening courses and non-credit adult education courses will be offered by the College. The College also expects to develop community service programs to serve county citizens through the utilization of college resources and facilities.

CAMDEN COUNTY COLLEGE

Camden County College is a two-year public community college located in Blackwood. It is a correspondent of the Middle States Association. The College was officially founded with the appointment of the Board of Trustees in 1966 and the College admitted its first class in September, 1967. The College currently enrolls over 3,000 students of whom approximately two-thirds are full-time. Programs are offered in liberal arts and career-fields leading to the Associate in Arts, Associate in Science and Associate in Applied Science degrees. The Continuing Education Division provides courses identical to the day offerings on a degree and non-degree basis. The summer program is designed to meet the needs of students enrolled in the College, students attending other colleges, and new students.

CENTENARY COLLEGE FOR WOMEN

Centenary College for Women is a two-year independent institution located in Hackettstown in the northwest part of the state. It is a member of the Middle States Association. Chartered in 1867, it opened its doors in 1874 offering college preparatory programs for men and women and four-year college degree granting programs for women. The women's college was continued for 23 years; the coeducational preparatory program was offered until 1910. From that time until 1929 Centenary was a preparatory school for girls. A two-year program was introduced in 1929 and the preparatory program came to an end in 1940. The College currently enrolls 688 students. The Associate in Arts degree is granted to students who complete either a transfer program or one of a number of occupational curricula that include radio-television, merchandising, secretarial studies, a variety of auxiliary medical areas, and the training of teachers for private nursery schools. In addition to a wide variety of courses in the liberal arts, there are also offerings in fine arts, theater arts, music, and home economics. In 1959 the College introduced a four-year course for medical technologists leading to the Bachelor of Science degree. The growth in population in the northeast part of the state is being reflected in a constantly increasing enrollment of commuting students.

CUMBERLAND COUNTY COLLEGE

Cumberland County College is a two-year public community college located in Vineland. It is a recognized candidate of the Middle States Association. Ground was broken for the five existing buildings in December, 1965, and the following Fall classes were held for the first time. The College currently enrolls 1,228 students of whom approximately two-thirds are full-time. Cumberland County College offers career-oriented and liberal arts programs leading to the Associate in Arts and Associate in Science degrees and, in addition, certificate courses in occupational and technical skills are offered in response to the particular needs of the community. The College is in continuous operation from 8:00 a.m. to 10:00 p.m. and does not distinguish between day and evening sessions.

EDWARD WILLIAMS COLLEGE

Edward Williams College is a two-year coeducational college affiliated with Fairleigh Dickinson University. It is a member of the Middle States Association. The College, located in Hackensack in the northern part of the state, was founded in 1964. Programs are offered in the liberal arts to prepare students to transfer to any of the three campuses of Fairleigh Dickinson University and to similar programs at other institutions. The College currently enrolls 386 full-time students and awards the Associate in Arts degree.

ENGLEWOOD CLIFFS COLLEGE

Englewood Cliffs College is a two-year non-sectarian co-ed college located in Englewood Cliffs, New Jersey, in the northeastern part of the state. It is a correspondent of the Middle States Association. The College was founded in 1962 and for the first four years of its existence operated as a Sister Formation College. The first full-time students were enrolled in 1967. The College currently enrolls 248 students of which approximately 80 percent are full-time students and awards the A.A. degree. Programs include special courses in nursing and adult education. A Business Curriculum will be offered beginning September, 1969.

ESSEX COUNTY COLLEGE

Essex County College is a two-year public community college with two locations in Newark. It is a correspondent of the Middle States Association. The main campus is located at 31 Clinton Street in downtown Newark and the Allied Health Center is located at 375 Fuller Terrace adjacent to Beth Israel Hospital on Newark's south side. The College was officially founded in 1966 with the appointment of the Board of Trustees and admitted its first class in September, 1968. In 1969 Essex County College enrolled 4,800 students of which three-fourths were full-time. The College offers liberal arts and career-oriented programs leading to the Associate in Arts, Associate in Applied Arts, Associate in Science, and Associate in Applied Science degrees. Diploma programs of one semester, designed for skill training and direct occupational entry, and certificate programs, which require a year of college training for direct occupational entry, are also offered. Courses are offered in the evening as an extension of the regular day program and also through special programs requested by the community. The College also provides the opportunity to obtain college credits and degrees through attendance on weekends. Year-round operation is provided through two 16-week semesters, fall and winter, and two eight-week terms, spring and summer.

GLOUCESTER COUNTY COLLEGE

Gloucester County College is a two-year public community college located in Sewell. It is a correspondent of the Middle States Association. After three years of planning, the College opened its doors in September, 1968. The College currently enrolls 1,149 students approximately two-thirds of whom are full-time and offers liberal arts and career-oriented programs leading to the A.A., A.S., and A.A.S. degrees. The College also offers evening courses and a summer session. As part of a community relations program, the College works with local business and industry to develop special credit and non-credit courses for their personnel.

LUTHER COLLEGE

Luther College is a Lutheran two-year coeducational college located in Teaneck, New Jersey, in the northeastern part of the state. The College traces its history to 1919 although it was not until 1951 that the College occupied its present campus in Teaneck. The College currently enrolls 90 students almost all of whom are full-time students and awards the Associate in Arts in Religion degree.

MERCER COUNTY COMMUNITY COLLEGE

Mercer County Community College is a two-year public community college located in Trenton. It is a recognized candidate for membership in the Middle States Association. Mercer County Community College began operation with the Summer Session of 1967 and is presently located in downtown Trenton. The College plans to move to its new campus in West Windsor Township in the Fall of 1971. The College currently enrolls 4,337 students just under one-half of whom are full-time students and offers liberal arts and career-oriented programs leading to the A.A., A.S., and A.A.S. degrees. Evening courses and a summer session are offered by the College. The Community and Extension Division offers courses on and off campus for the non-matriculating, non-degree student. These include courses for housewives, experienced secretaries, real estate salesmen, real estate brokers, and experienced business men. Special non-degree certificate programs are also offered in the Extension Division in such areas as apprentice training, clerical skills, and machine shop technology.

MIDDLESEX COUNTY COLLEGE

Middlesex County College is a two-year public community college located in Edison. It is a recognized candidate for membership in the Middle States Association. The College opened its doors to students for the first time in September, 1966, and currently enrolls 5,202 students. The College offers liberal arts and career-oriented programs leading to the A.A. and A.A.S. degrees. Evening courses are offered on both a credit and non-credit basis. The summer session is organized primarily to meet the needs of college students and other high school graduates who require additional course work before returning to or entering college, although some non-credit offerings are also given. Special programs offered by the College include a pre-technical preparatory program, a job horizon program for women, and a teacher aide program.

COUNTY COLLEGE OF MORRIS

County College of Morris is a two-year public community college located in Randolph Township. It is a correspondent of the Middle States Association. The College opened its facilities on its permanent campus in the Fall of 1968. It now has an enrollment of 3,185 students of whom just under one-half were full-time. The College conducts liberal arts, business and career programs leading to the Associate in Applied Science degrees.

MOUNT SAINT MARY COLLEGE

Mount Saint Mary College is a two-year Catholic college for women located in North Plainfield. The college was founded in 1905 by the Sisters of Mercy of the Trenton Diocese and prepares students for both the civil and ecclesiastical community. The College currently enrolls 63 students of which approximately two-thirds are full-time students. The College awards the Associate in Arts degree. A summer session of five weeks is open to other students as well as those registered for the academic year.

OCEAN COUNTY COLLEGE

Ocean County College was the state's first two-year public community college to be established under the New Jersey County College Law of 1962. Located four miles north of Toms River, it is in the geographical center of the county. Ocean County College is a recognized candidate for membership in the Middle States Association.

The College offers four collegiate transfer programs leading to the Associate in Arts degree, nine collegiate technology programs leading to an Associate in Applied Science degree, and pre-technical and general education courses. The Department of Continuing Education administers Evening Division and Summer Session classes and extension courses at Lakehurst Naval Air Station and at McGuire Air Force Base. A Weekend College with Saturday classes started in September, 1969.

The College opened its doors in September, 1966. By fall semester 1969 the enrollment count was 2,516, with 1,338 full-time and 1,178 part-time students. Ocean County College is equipped with six typewriter terminals which connect by telephone wire to a computer center in Princeton, and beginning in September of 1969, instruction in computer science courses will use these facilities.

PASSAIC COUNTY COLLEGE

A study group appointed by the Passaic County Board of Freeholders is currently investigating the possibility of establishing a public two-year community college in Passaic County. The study group is expected to present its findings in late 1969.

SAINT JOSEPH'S COLLEGE

Saint Joseph's College is a two-year Catholic college for men located in Princeton in central New Jersey. The purpose of the College is to prepare young men for the priesthood in the congregation of the Mission of St. Vincent de Paul. The College traces its history back to 1818 with the founding of St. Mary's Seminary at Perryville, Missouri. It was not until 1914 that the College moved to Princeton and became known as Saint Joseph's College. In 1969 the College enrolled 28 full-time students. It awards the Associate in Arts degree. After the academic year 1969-1970 the College Department of the Seminary will be transferred to a university campus.

SALESIAN COLLEGE

Salesian College is a two-year Catholic college for women situated in North Haledon, ten miles northwest of New York City. The College was established in 1948 for the education of the members of the Salesian congregation in order to prepare them for teaching and administrative positions in the field of Catholic education. The College enrolls 61 students of which approximately two-thirds are full-time students and awards an Associate in Arts degree in liberal arts and education.

SOMERSET COUNTY COLLEGE

Somerset County College is a two-year public community college located in Green Brook. It is a correspondent of the Middle States Association. The College opened in the Fall of 1968 in temporary headquarters and will move to its new campus in Branchburg Township in the Fall of 1970. The College currently enrolls 509 full-time students and offers liberal arts and career-oriented programs leading to associate degrees. Evening courses include credit courses identical to those taught in the daytime and some non-credit courses. A summer session is offered primarily for Somerset County College students, although students from other colleges are permitted to enroll on a space availability basis.

TOMBROCK COLLEGE

Tombrock College is a private two-year college which emphasizes community service. It is located in West Paterson in the northeastern part of the state. Although men are admitted to evening courses, only women may matriculate at present in full-time day programs. Tombrock College was founded in 1956 by a Roman Catholic Franciscan congregation, the Missionary Sisters of the Immaculate Conception. Its faculty and students include persons of all religious beliefs, however. The College currently enrolls 427 students of whom approximately two-thirds are full-time students. The College awards the Associate in Arts degrees with specializations in liberal arts and elementary education, and Associate in Applied Science degrees for secretarial studies. The College sponsors both part-time day and part-time evening programs. Evening students may enroll in a degree program, or as special students on a non-matriculated basis. The College also offers a summer session and a variety of special training programs such as a New Careers curriculum for teacher aides.

UNION COLLEGE

Union College is an independent, non-denominational, co-educational, two year community college. It is a member of the Middle States Association.

Union College was founded in 1933 with Emergency Relief Funds. Two years later when federal funds ran out Union College was organized as an independent institution.

The College operated as an evening institution from 1933 to 1941 at Abraham Clark High School, Roselle. A Day Session was added in 1941 and the College moved to a school building in Cranford in 1942. Grant School was the College's home until moving to a 30-acre campus and developing a modern plant in 1959.

Union College offers programs in liberal arts, engineering, physical and life sciences, business administration and law enforcement. The College also conducts a program for first-year nursing students in affiliation with Elizabeth General Hospital and Perth Amboy General Hospital. Day and Evening Sessions are offered and evening students may attend as degree or non-degree candidates.

Under contract with the Union County Coordinating Agency for Higher Education, Union College will provide for Union County university-parallel programs in lieu of a County College. The contract provides for channeling state and county funds to Union College through the Coordinating Agency.

As part of the arrangement with the Union County Coordinating Agency for Higher Education, Union College will confer Associate in Applied Science degrees upon graduates of the Union County Technical Institute in Scotch Plains who successfully complete college-level programs. About 204 full-time and 25 full-time equivalent students were enrolled in these programs in the 1969-70 academic year.

The Dental Hygiene Program is a cooperative arrangement between the Union County Technical Institute, Union College, and the New Jersey College of Medicine and Dentistry.

In the 1968-69 academic year, Union College enrolled about 1,000 full-time and 700 part-time students. In addition, about 900 students were enrolled in the Summer Session and Intersession and 100 in a College Readiness Program. All programs are designed so that graduates can transfer to four-year colleges and universities with advanced standing, and all programs lead to Associate in Arts degrees. Approximately 85% of the students transfer to four year baccalaureate programs.

VILLA WALSH COLLEGE

Villa Walsh College is a two-year Catholic college for women located in Morristown in Morris County. The College was originally established in 1928 with normal school status and became a two-year institution of higher learning in 1948. The College provides education for the Postulants, Novices, and Sisters of the Institute of the Religious Teachers Fillipini. In 1969 the College enrolled 90 students of which 25 were full-time. Villa Walsh College awards the A.A. degree in a general liberal arts program or with specialization in music.

Four-Year Colleges

ALMA WHITE COLLEGE

Alma White College is a private, coeducational college, Christian in emphasis, offering programs on the undergraduate level. The College is located in Zarephath, a small town, three miles southwest of Bound Brook in central New Jersey. The College began offering courses of instruction in 1917 and was accredited four years later. The College currently enrolls 159 students of which 124 are full-time students and offers programs in the liberal arts and teacher education leading to the B.A. and B.S. degrees. The College calendar includes a summer term. Zarephath Bible Seminary is also located on the campus and is dedicated to the preparation of students for the ministry.

BLOOMFIELD COLLEGE

Bloomfield College is a private coeducational college, associated with the United Presbyterian Church, which offers courses on the undergraduate level. The College is located in Bloomfield, a suburban community fifteen miles from New York City. The College grew out of the establishment in 1868 of the Theological School, a special school for training German speaking ministers. Bloomfield College was established in 1926 as an independent institution offering a liberal arts program. It is a member of the Middle States Association.

The College currently enrolls 1,557 students of which approximately 1,100 are full-time students. Programs in the liberal arts, secondary education and nursing leading to the B.A. degree are offered. The College also conducts a limited evening session for degree students. Summer sessions, both day and evening, are offered for students who are in good academic standing at other institutions. Programs designed to help the high school student, the high school graduate, and the student failing in college are also offered as part of the summer schedule.

CALDWELL COLLEGE FOR WOMEN

Caldwell College for Women is a Catholic liberal arts college located in Caldwell about twenty miles from New York City. The College was founded in 1939 by the Sisters of Saint Dominic and currently enrolls 727 students of which 572 are full-time. Caldwell College is a member of the Middle States Association. Programs leading to the B.A. and B.S. degrees are offered in twelve areas of liberal arts disciplines, business, medical technology and elementary education. Pre-professional programs are offered in medicine, law and nursing. Opportunity is also available for foreign study, honors program, and inter-institutional programs with Drew University and Seton Hall University. Caldwell College is affiliated with the Institutum Divi Thomae Research Foundation, Cincinnati, Ohio.

COLLEGE OF SAINT ELIZABETH

The College of Saint Elizabeth is a Catholic liberal arts college for women offering courses on the undergraduate level. The College is located in Convent Station not far from Morristown in northern New Jersey. The College was founded in 1899 in response to the need for the higher education of women and was the first permanent four-year college for women to be founded in New Jersey. The College of Saint Elizabeth is a member of the Middle States Association. The College enrollment for 1969-70 was 816 students, of which 699 were full-time. The College provides programs leading to the Bachelor of Arts and Bachelor of Science degrees with offerings in seventeen major fields. It offers approved secondary and elementary teacher preparation programs, including an urban teacher education curriculum. The College has honors and independent study programs. Students may study abroad during the junior year. Courses on Saturday mornings and some evenings are open to men and women although men are admitted only on a non-matriculated basis. A summer session available to both men and women is also offered.

DON BOSCO COLLEGE

Don Bosco College is a Catholic men's college offering courses on the undergraduate level. The College is located in Newton in Sussex County and traces its origins to 1928. Don Bosco College is a member of the Middle States Association. At present the College limits its admission to candidates for the priesthood and to members of a religious society and its candidates. In addition to Salesians, Benedictine students and diocesan students of the Byzantine Rite attend. The College currently enrolls 126 students, almost all of whom are full-time, and offers programs leading to the B.A. degree.

FELICIAN COLLEGE

Felician College is a Catholic college for women offering courses on the undergraduate level. Felician College is located in Lodi in northeastern New Jersey. The College was founded by the Felician Sisters as a normal school in 1923 confining itself to the training of in-service teachers. The institution was reorganized in 1941 as a junior college and became a four-year college in 1967. The first four-year class graduated in 1969. Felician College is accredited by the Middle States Association. Felician College currently enrolls 406 students, more than two-thirds of whom are full-time students. Felician College offers programs in liberal arts and elementary education leading to the B.A. degree. A two-year nursing program leading to the A.A. degree is also offered.

GEORGIAN COURT COLLEGE

Georgian Court College is a Catholic liberal arts college for women offering courses on the undergraduate level. The College is located in Lakewood in central New Jersey and was founded in 1908. Georgian Court College is a member of the Middle States Association. The College currently enrolls 704 students, 645 of whom are full-time, and offers programs in liberal arts and education leading to the B.A. and B.S. degrees. Students may select major subjects from fourteen fields. A summer session is offered which is designed primarily for the younger members of the congregation of the Sisters of Mercy although enrollment is also open to Georgian Court students, students from other colleges, and in-service teachers.

GLASSBORO STATE COLLEGE

Glassboro State College is located in Glassboro, New Jersey, twenty miles southeast of Philadelphia. It is a state supported, non-sectarian, co-educational college founded in 1923 as a two year normal school. It is accredited by Middle States Association. By 1952 the college offered both bacculaureate and masters programs in several professional fields. In 1966 the College was authorized to offer liberal arts majors in addition to the majors in areas of professional education preparation. The College offers programs leading to the Bachelor of Arts degree in 17 areas of professional preparation, including teacher librarians, and six areas of liberal arts, and programs leading to the Master of Arts degree in 24 areas. Most of the graduate work presently offered is related to the field of education. The College operates the Bozoth Campus School to provide observation and teaching facilities for students majoring in education curricula.

Glassboro College enrolls over 3,900 undergraduates and 35 graduate students on a full-time basis. In addition the college provides instruction for approximately 5,000 students attending on a part-time basis during evenings and summers. One-half of the part-time students are enrolled in graduate courses.

IMMACULATE CONCEPTION SEMINARY

Immaculate Conception Seminary, located in the Darlington section of the Township of Mahwah in Bergen County, is an institution which prepares men for the Roman Catholic Preisthood. It is operated and staffed by the Archdiocese of Newark. The current enrollment is 142 full-time students. The course of studies covers six years, i.e., the Junior and Senior years of College and four years of Theological study after graduation from college. The Liberal Arts curriculum of the Seminary is an integral part of the College of Arts and Sciences of Seton Hall University which confers the B.A. degree on qualified seminarians at the conclusion of their senior year. The Theology department of the Seminary is affiliated with the Catholic University of America which confers the S.T.B. degree on qualified students at the conclusion of their Theology curriculum. A Summer Session is offered by the Seminary for its own students, either at the Seminary or in supervised field training. The Seminary was founded in 1860 and was located on the campus of Seton Hall University in South Orange, New Jersey until 1926 when it moved to its present location at Darlington.

JERSEY CITY STATE COLLEGE

Jersey City State College was founded in 1927 as New Jersey State Normal School. The College is accredited by the Middle States Association. It is the only state college located in the heart of an older urban area. Because of its location, the college draws many faculty from New York City. In addition to its regular departments Jersey City State has established the A. Harry Moore School and the Center for Occupational Studies.

Jersey City State College offers programs leading to the Bachelor of Arts degree in 23 fields including five of professional qualification in education. In addition, students taking any of 15 liberal arts majors may prepare for careers in teaching by electing a supplemental sequence of professional education courses. The Graduate Division of the college offers programs leading to the Master of Arts degree in three liberal arts fields, in 13 areas of professional education, and a Professional Diploma for a sixth year of study in the field of school psychology. The college established its masters programs in 1960 and was authorized to offer its first liberal arts programs in 1966. All graduate work is supervised by the Graduate Division.

Jersey City State enrolls over 3,300 undergraduate and 32 graduate students on a full-time basis. In addition over 3,600 students attend on a part-time basis. One-fifth of the part-time students attend graduate courses. About one-third of the undergraduate programs are in the fields of art and the humanities. The Evening Division of the College offers programs in areas of professional education and school nursing preparation for undergraduates; in general elementary education fields for graduates of normal schools; and non-degree programs. Credits may be tranferred from one division to another. The College also offers part-time courses during a summer session.

MONMOUTH COLLEGE

Monmouth College, an independent, non-denominational, coeducational institution, was founded in 1933 and is located in West Long Branch, New Jersey. The College is a member of the Middle States Association.

It began as Monmouth Junior College and has awarded 3,703 associate degrees. In 1956 it became a four-year college and was authorized to confer Bachelor of Arts and Bachelor of Science degrees.

Enrollment in September, 1969, was 5,286 undergraduate and 527 graduate students. Approximately two-thirds of the total enrollment is full-time. There are accommodations for 1,000 resident students on campus; another 1,000-1,500 live in off-campus housing; the rest commute.

Besides associate and baccalaureate degree programs in liberal arts and sciences, Monmouth College offers degrees in Business Administration, Electronic Engineering, and Teacher Education. Since 1956 it has awarded 4,069 baccalaureate degrees. Masters' degrees are offered in Electronic Engineering, English, Mathematics, Physics, and Teacher Education. Fifteen masters' degrees have been conferred as of June, 1969.

Administratively the college is divided into three divisions: Junior College, Senior College, and Graduate. All divisions offer summer programs. There is also an Evening Division with the same standards as apply to other college programs.

MONTCLAIR STATE COLLEGE

Montclair State College, Upper Montclair, New Jersey, is a co-educational, state college which offers undergraduate and graduate programs in the arts and sciences and in the professional preparation of school personnel. Montclair is accredited by the Middle States Association. The College is composed of three divisions: Administration, Business and Financial Services, and Instruction. Beginning in September, 1970, the Division of Instruction will be organized into five undergraduate schools (Applied Arts and Sciences, Creative Arts, Humanities, Science and Mathematics, Social and Behavioral Sciences) and three graduate schools (Arts and Sciences, Education, Management Theory and Practice).

The College was founded in 1908 as a Normal School. It became a state teachers college in 1927 empowered to grant the Bachelor of Arts degree and first offered graduate work leading to the Master of Arts degree in 1932. As of July 1, 1958, the official name of the College became Montclair State College. Montclair admitted the first group of students into its arts and sciences programs in the fall of 1966. By the Higher Education Act of 1966, the governance of Montclair State College was transferred to the newly created State Board of Higher Education and to the Montclair State College Board of Trustees on July 1, 1967.

The College currently offers eighteen undergraduate arts and sciences programs in addition to its teacher preparation courses of study. Graduate programs are offered in 23 fields.

Included within the Division of Instruction, the Evening Division offers part time undergraduate and graduate programs during the academic year as well as a full time summer session. Centers and projects of the College administered through the Evening Division include the Adult Education Resource and Service Center, the Bureau of Field Studies, the Educational Foundation for Human Sexuality and the New Jersey Center for Economic Education.

Montclair State College enrolled 5,478 undergraduate students and 3,549 graduate students for the 1969 fall semester. Of those undergraduates, 4,584 were full-time students and 904 were part-time students.

NEWARK STATE COLLEGE

Newark State College located in Union, New Jersey was founded in 1855 as Newark Normal School. Newark State is accredited by the Middle States Association. By 1950 Newark State College offered baccalaureate and masters programs in fields of education. Since 1966 the college has functioned as a publicly financed co-educational college of liberal arts and professional studies. The college serves undergraduate and graduate students in both the Resident College and the Field Services Division.

Newark State offers programs leading to the Bachelor of Arts degree in 16 areas of professional preparation in education including teacher-librarian and in seven areas of liberal arts. The Campus School is organized as an education resource research center with an emphasis on special education. At least two semesters of resident work must be completed at the college in order to qualify for a degree. The Master of Arts degree is offered in nine fields of education and two of liberal arts. The evening division offers courses evening during the regular academic year and both day and evening during the summer.

Newark State enrolls 3,961 full-time students, as well as 3,500 students on a part-time basis. Approximately 3,200 students are enrolled in graduate programs.

NORTHEASTERN COLLEGIATE BIBLE INSTITUTE

Northeastern Collegiate Bible Institute is a private co-educational college, Christian in emphasis, located in Essex Fells in Northeastern New Jersey. The Institute began in 1950 holding classes in a local church and moved to its present campus in 1952. The chief emphasis of the school is acquainting the student with the contents, meaning, interpretation, and theology of the English Bible. Northeastern Collegiate Bible Institute is a recognized candidate for membership in the Middle States Association. The College currently enrolls 297 students of which 226 are full-time students. The institute has programs leading to the Bachelor of Religious Education degree, the Bachelor of Sacred Music degree, and the five-year Bachelor of Theology degree. These programs prepare graduates for church-related vocations: the ministry, mission field, sacred music, and parochial education. A summer session is also offered.

PATERSON STATE COLLEGE

Paterson State College is a state supported non-sectarian institution founded as a city normal school in 1855. The college became a state normal school in 1923 and a state teachers college in 1937. In 1951 the college moved to its present campus in Wayne, New Jersey. Paterson State is accredited by the Middle States Association. In 1955 masters programs were begun in education fields. The college became a multi-purpose liberal arts college with the addition of a baccalaureate program in nursing and a variety of major and minor programs in liberal arts in 1966.

At Paterson State programs are offered leading to the baccalaureate degree in 20 areas including 13 of professional preparation in education and one for teacher librarians. In addition programs in music and nursing lead to the Bachelor of Science degree.

The Evening Division of Paterson State offers Bachelor of Arts degree programs in elementary education and in the liberal art fields of English and History. Students may transfer credit from the evening to the day division. The evening division operates the six-week summer session, both day and evening, which includes undergraduate and graduate courses as well as special seminars, workshops, and non-credit courses.

The Graduate Division of Paterson State offers programs leading to the M.A., M.Ed., M.S. and M.A.T. degrees. These programs are offered in the day and evening division and during the summer session. Most of the graduate programs are related to education.

Paterson State enrolls over 4,200 undergraduate and 50 graduate students on a full-time basis as well as 3,300 students on a part-time basis. About one-half of the part-time students are enrolled in graduate programs.

RIDER COLLEGE

Rider College is a co-educational, private, non-sectarian college located on a new suburban campus between Trenton and Princeton. The College was founded in 1865 as Trenton Business College and developed in that city until it moved to its present site in 1964. Rider college is a member of the Middle States Association. Until 1957 Rider was essentially a college of business administration and teacher education. Since then an extensive liberal arts program has been introduced and over one-third of the student body is now enrolled in the various major curricula of the School of Liberal Arts and Science. Two-thirds of the faculty are under the jurisdiction of the Dean of the School of Liberal Arts and Science.

Rider is organized into four schools: the School of Liberal Arts and Science, the School of Education, the School of Business Administration and the Evening School. The

School of Business Administration and the School of Education each have a division of graduate studies. The college offers programs leading to the A.B. and B.S. in Commerce degrees in 27 fields; programs leading to the M.A. and M.B.A. degrees in three fields; and one program leading to the A.A. degree in a business field.

The evening school offers a limited number of four-year programs leading to the B.S. in Commerce and the Bachelor of Arts degrees; six two-year degree programs leading to the A.A. degree in business fields, and a variety of non-degree adult education courses.

A summer session offered by the college enables qualified students to complete the requirements for a baccalaureate degree in three years.

Students enrolled in teacher education participate in professional laboratory experiences in the Freehold Township School District, the Princeton Regional School District, and the Willingboro School District. These special projects provide the prospective teachers with opportunities to observe and become involved in various aspects of the operation of the public school today.

The Rider College Library is the official depository of the records of the New Jersey Business Teachers Association and the Eastern Business Teachers Association. The library also contains a number of special source holdings including a microfilm collection of Civil War Era diplomatic correspondence between the United States, France and Great Britain, and an extensive collection of Delaware Valley newspapers dating from colonial times.

Rider College enrolls over 3,500 full-time undergraduates, and 19 full-time graduate students, as well as 2,400 part-time students, of whom approximately 300 attend graduate level courses.

SAINT PETER'S COLLEGE

Saint Peter's College in Jersey City is a private, coeducational liberal arts college and school of business administration founded in 1872 by the Jesuit order. In 1936 the College moved to its present campus on Kennedy (Hudson) Boulevard. Day and evening sessions of the College of Arts and Sciences offer 18 distinctive programs in the humanities and in the natural, social and behavioral sciences leading to the B.A. and B.S. degrees. The School of Business Administration in day and evening session sponsors three programs in accountancy, business and economics leading to the B.S. degree. Saint Peter's also offers pre-law, pre-dental, pre-medical, and elementary and secondary education programs. Two summer sessions — each of five weeks in length — are available for students of Saint Peter's and other undergraduate institutions. A reading center offers non-credit courses for adults and for elementary, high school and college students in reading, speech, mathamatics, English as a second language, typewriting and Spanish conversation. A computer center provides a special series of day and evening courses in a non-degree program in the field of data processing. Saint Peter's College has 4,716 students: 50% of them are enrolled full-time. The College is accredited by the Middle States Association.

SHELTON COLLEGE

Shelton College is a four-year Christian liberal arts college offering courses on the undergraduate level. It is located in Cape May, New Jersey and has been in the state since 1954 when it moved from New York City to Ringwood Borough. The move to Cape May was made in 1964. The College enrolls approximately 160 students and offers programs leading to the Bachelor of Arts degree. The College is associated with the Twentieth Century Reformation Movement.

TRENTON STATE COLLEGE

Trenton State College is located on a 210 acre campus in Ewing Township four miles north of Trenton, New Jersey. The college was founded in 1855 as the New Jersey State Normal and Model School of Trenton. The school granted its first B.S. degree in 1926 and moved to the present Hillwood Lakes campus in Ewing Township between 1930 and 1937. Trenton State is a member of the Middle States Association. The first masters degree was offered in 1951 and in 1966 liberal arts programs were begun at the baccalaureate and masters level.

Trenton State offers a liberal arts curriculum leading to the Bachelor of Arts degree in 15 areas. Professional programs leading to the B.A. and B.S. degrees are available in nursing, business administration, and 20 areas of teacher education. Programs leading to the Master of Arts degree are offered in 11 fields of education and two fields of liberal arts. The Graduate Division supervises all graduate study.

The Division of Field Services offers courses in evening and summer programs to full and part-time students. Students may seek transfer from the Field Services Division to the full-time day programs, usually without loss of credit.

Trenton State enrolls over 4,300 undergraduate students full-time as well as 5,200 students part-time including approximately 2,000 graduate students.

UPSALA COLLEGE

Upsala College is a coeducational Lutheran affiliated college offering courses on the undergraduate level. The College is located in East Orange less than fifteen miles from New York City. It was founded by Lutherans of Swedish descent living in the eastern United States and moved to its present location in 1924. Upsala College is a member of the Middle States Association. The College currently enrolls 1,843 students of which 1,381 are full-time and offers programs in liberal arts, business administration, education, and engineering leading to the B.A. and B.S. degrees. The College also offers an A.B.-M.B.A. program in affiliation with Rutgers University and participates with the New York University School of Science and Engineering in a 3-2 engineering program. Nurses in training at the Schools of Nursing of Clara Maass Memorial Hospital (Lutheran Memorial), Belleville, East Orange General Hospital, and Orange Memorial Hospital, pursue academic studies at Upsala. These courses may be counted toward degrees. A summer session is offered by the college.

WESTMINSTER CHOIR COLLEGE

Westminster Choir College is a private coeducational college located in Princeton, New Jersey. The College is interdenominational and is designed to prepare young men and women for the ministry of music in churches and schools. The College traces its origin to the Dayton Westminster Choir School which held its first session in Dayton, Ohio in 1926. In 1929 the institution moved to Ithaca, New York where it was affiliated with Ithaca College until 1932 when it came to its present location in Princeton. Westminster Choir College is accredited by the Middle States Association. The College currently enrolls 419 students almost all of which are full-time and offers programs leading to the Bachelor of Music and Bachelor of Music Education degrees.

NEW STATE COLLEGE NORTH AND SOUTH

Two new state colleges are currently in the planning stages. Boards of Trustees for both institutions have been meeting regularly and presidents have been selected.

The new state college — northern New Jersey (to be located in Bergen County) plans to open with an enrollment of 400-800 in September of 1971 and to expand through 1980 to a full-time undergraduate enrollment of 5,800. The president and key planning staff assumed their duties in September, 1969. While specific programs have not been determined as yet, heavy emphasis will be placed on programs in the liberal arts and sciences.

The new state college — southern New Jersey which will be named Richard Stockton State College will be located in Galloway Township near Atlantic City. The College plans to open in September, 1971 with an initial enrollment of 400-800 students, and will expand through 1980 to a full-time undergraduate enrollment of 5,000. The president and key planning staff assumed their responsibilities in September, 1969. While specific programs have not been determined as yet, emphasis will be placed on programs in the liberal arts and sciences and in professional programs based on regional needs.

Universities and Professional Schools

DREW UNIVERSITY

Drew University located in Madison, New Jersey, was founded in 1866 as the Drew Theological Seminary. The College of Liberal Arts was begun in 1928. In 1943 that college first admitted women students, joining the other units in coeducation. In 1955 the Graduate School operated as a separate school for the first time following many years of development since the establishment of the first graduate study program in 1912. Drew University is accredited by the Middle States Association.

The College of Liberal Arts offers programs leading to the B.A. degree in twenty-two fields. The Theological School, which is registered as a Methodist seminary offers programs leading to the Bachelor of Divinity, Master of Religious Education, and Master of Sacred Theology degrees. All require the foundation of a baccalaureate degree. The Graduate School offers programs leading to the Master of Arts and Doctor of Philosophy degree in four areas of theological studies and in English literature, and to the M.A. degree in political science.

In addition to the regular academic program the College of Liberal Arts has developed several special semesters of study off the campus. Special semester programs are offered on the United Nations, in London, in Washington, in Brussels (on the European Economic Community), and in art in New York City. Except for the Washington semester, these programs are open to qualified students of other colleges and universities. Cooperative programs are offered to combine a liberal arts program with a more specialized program elsewhere and to reduce the length of time needed to complete an advanced degree. The student participant studies at least three years at Drew and two or more at the cooperating institution and receives a degree from each institution. Cooperative programs are offered in forestry, in engineering, in business administration, and in language-library work.

Other cooperative arrangements include summer internship experiences in business and federal government work, and study in marine biology at Woods Hole, Massachusetts, and at the University of Miami. The College also has provision for permitting students to spend the junior year in a foreign university under any of several programs.

The University maintains a conference center at Little Brook Farm near Bernardsville, New Jersey, in addition to the main campus facilities.

Drew University enrolls about 1,260 undergraduates and 217 professional and graduate students. Part-time enrollment, included in the foregoing figures, is approximately 187 students in all schools.

FAIRLEIGH DICKINSON UNIVERSITY

Fairleigh Dickinson University is an endowed, non-sectarian coeducational institution offering programs on the undergraduate, graduate, and professional levels. It was organized in 1941 and opened its first campus at Rutherford, New Jersey in 1942. Subsequent growth and development led to the opening of two additional campuses in Northern New Jersey one in Teaneck, the other at Madison. In 1964, Edward Williams College affiliated with the university as a two-year unit which offers liberal arts at Hackensack. The Wayne extension in Wayne, New Jersey, was opened in September, 1965, for special programs and evening courses. The first overseas campus, Wroxton College, was opened in 1965 as a center for both undergraduate and graduate study. A marine study facility was opened in the summer of 1967 at St. Croix in the Virgin Islands. Fairleigh Dickinson University is a member of the Middle States Association.

Four undergraduate colleges — Liberal Arts, Science and Engineering, Business Administration, and Education — offer programs leading to the A.B., B.S., and B.S.N. degrees. The Graduate School established in 1954 and the School of Dentistry established in 1956 offer programs leading to the M.A., M.S., M.B.A., M.S.D., M.A.T., and D.D.S. degrees.

The enrollment at Fairleigh Dickinson University now numbers over 19,000 of which 6,776 are full-time undergraduate students. 9,007 are part-time undergraduate and 2,733 are part-time graduate students.

The Evening Division offers courses on all campuses. Most of the degree programs offered by Fairleigh Dickinson University are available in the Evening Division. Credits may be transferred from one division to another without loss of credit. In addition undergraduate and graduate level courses are given in summer session at the Rutherford, Teaneck, and Florham-Madison campuses.

The University has established a Dental Research Center, and the Health Research Institute, to supplement research projects undertaken by faculty and students. The Board of Trustees established the Fairleigh Dickinson University Press in September, 1950 for the purpose of issuing publication of a scholarly or educational nature.

The University offers non-credit college level courses both on campus and in extension. Another part of the extension division is the Reading and Study Institute offering a special course and a guided study program for high school graduates who were unable to gain admission to the college of their choice.

NEWARK COLLEGE OF ENGINEERING

Newark College of Engineering is a coeducational public institution offering programs on the undergraduate and graduate levels. The College is located in downtown Newark and traces its origins to 1881 when it was founded as Newark Technical School. In 1919 the State Board of Education authorized the school to grant degrees in Engineering. NCE is accredited by the Middle States Association. The College is organized under five divisions: the Day Undergraduate Division, the Evening Undergraduate Division, the Graduate Division, the Division of Technology and the Division of Continuing Engineering Studies.

On the undergraduate level the College offers programs in Chemical, Civil, Electrical, Industrial, Mechanical Engineering and Engineering Science leading to the B.S. degree. On the graduate level the College offers courses leading to the degree of Master of Science in the fields of Chemical, Civil, Industrial, Electrical, and Mechanical Engineering. A program leading to the Doctor of Engineering Science degree is also offered in the fields of Chemical, Civil, Electrical and Mechanical Engineering. The College also offers post M.S. programs leading to the Engineer degree.

Within the Division of Technology individual courses and three year certificate programs are offered for men and women in industry who wish to further their technical, scientific, or mathematical training. The Division of Continuing Engineering Studies offers programs which are intended to update or broaden the education of practicing engineers, scientists and management personnel.

The enrollment of Newark College of Engineering in 1969 numbered over 6,000, with 4,048 in the Undergraduate Division, 899 in the Graduate Division, and the remainder in the Divisions of Technology and Continuing Engineering Studies. A summer session is offered on the undergraduate and graduate levels.

The Foundation for the Advancement of Graduate Study in Engineering, a privately incorporated and financed organization, has as its goal the development of a center of excellence in graduate study and research at Newark College of Engineering. The Foundation provides financial support and services for many facets of the College's research activities. The Foundation supports courses and programs for secondary school teachers in mathematics and science. It also provides research-affiliated experiences for secondary school students.

NEW BRUNSWICK THEOLOGICAL SEMINARY

The New Brunswick Theological Seminary, a Reformed Church seminary, was founded in 1784 with the election of the minister of the Collegiate Church in New York City as the first professor of theology. In 1810 the Seminary was moved to the campus of Queens College in New Brunswick which had also been established under the aegis of the Dutch Reformed Church. The present location overlooking the Nielson Campus of Rutgers College in New Brunswick was occupied in 1856.

Programs leading to a Professional Certificate or Bachelor of Divinity degree are offered for holders of the degree of Bachelor of Arts or its equivalent. The seminary also offers programs leading to the Master of Arts in Theology degree and the Master of Christian Education degree. Students enrolled in a degree program at the seminary may take graduate level courses at Rutgers and transfer the credits under certain conditions.

The New Brunswick Theological Seminary enrolls 51 full-time students.

NEW JERSEY COLLEGE OF MEDICINE AND DENTISTRY

The New Jersey College of Medicine and Dentistry was founded as Seton Hall College of Medicine and Dentistry in 1956. It came under state operation in 1965. New Jersey College of Medicine and Dentistry offers programs leading to the M.D. and D.M.D. professional degrees, as well as M.S. and Ph.D. degrees in several areas of the basic sciences. Martland Hospital, the College's clinical teaching facility also conducts a three year nursing program. The College's 1969 enrollment was 611 including medical students, dental students, Ph.D. and master's candidates in the basic sciences.

The College is the state's only four-year school of medicine and dentistry. It will open a new 11-acre interim campus at 100 Bergen Street, Newark in September, 1969. The major portion of the College's activities will be housed here and in the adjoining Martland Hospital (formerly Newark City Hospital). Plans are underway to construct a permanent campus immediately adjacent to this interim site. Until completion of the permanent campus in early 1973 the last two years of the dental program will continue to be taught in the College's rented facilities at the Jersey City Medical Center.

Clinical teaching in medicine is conducted in Martland Hospital, the Veterans Administration Hospital in East Orange and the Beth Israel Medical Center in Newark. Formal affiliations with other major community hospitals are currently in the process of negotiations.

PRINCETON THEOLOGICAL SEMINARY

Princeton Theological Seminary, established in 1812 by the General Assembly of the Presbyterian Church, U.S.A., operated on the campus of the College of New Jersey (now Princeton University). The separate campus of the Seminary was begun with the construction in Princeton of Alexander Hall in 1817, was enlarged in 1943 by the acquisition of the land and buildings belonging to the Hun Preparatory School, and was further enlarged in 1965 by the purchase of the Princeton-Windsor Apartments complex. Princeton Theological Seminary is accredited by the Middle States Association.

The Seminary offers programs leading to the Bachelor of Divinity (B.D.), Master of Religious Education (M.R.E.), Master of Theology (Th.M.), and Doctor of Theology (Th.D.) degrees. There also is conducted throughout the year a program of Continuing Education for ministers and church workers.

Regularly enrolled students of the Seminary may, with the approval of the Seminary and the University, take certain courses at the University as part of their Seminary programs. Similarly a student in the University may take courses at the Seminary.

The Princeton Theological Seminary enrolls over 500 full-time students and over 100 part-time students. All candidates for a degree at the Seminary must present evidence of successful completion of a liberal arts curriculum leading to a baccalaureate degree.

PRINCETON UNIVERSITY

Princeton University is a privately supported, nondenominational university providing undergraduate and graduate instruction for men and women primarily in the liberal arts, sciences and engineering. It was founded as the College of New Jersey in 1746 with its classes first meeting in Elizabeth, New Jersey, and later in Newark. The College moved to Princeton in 1756 with the completion of Nassau Hall, and in 1896 changed its name to Princeton University. Princeton is accredited by the Middle States Association.

From the beginning, Princeton, with a present-day faculty of over 875 and a research staff of 650, has been a center of liberal studies. In addition to a number of interdepartmental programs, plans of study are offered by 40 departments. The oldest of the University's three professional schools, the School of Engineering and Applied Science, dates to 1870, while the School of Architecture and Urban Planning was founded in 1919 and the Woodrow Wilson School of Public and International Affairs in 1930.

Princeton sustains a 2,200,000-volume library system, the Research Center for Urban and Environmental Planning, the Office of Population Research, a Computer Center serving Princeton as well as other New Jersey institutions, the Council of the Humanities, the Industrial Relations Section, several hundred faculty-led research projects and numerous study and research programs such as African Studies, Afro-American Studies, American

Civilization, East Asian and Near Eastern Studies, Russian Studies and Science in Human Affairs.

The University also includes the James Forrestal Campus on which are located the research facilities of the Department of Aerospace and Mechanical Sciences, the Geophysical Fluid Dynamics Laboratory, the Plasma Physics Laboratory, the 3-billion-electronvolt Princeton-Pennsylvania proton accelerator and other scientific and engineering projects.

Princeton confers the following degrees: Bachelor of Arts (A.B.) and Bachelor of Science in Engineering (B.S.E.); Master of Arts (A.M.), Master of Fine Arts (M.F.A.), Master of Science in Engineering (M.S.E.), Master in Public Affairs (M.P.A.) and Doctor of Philosophy (Ph.D.) in some 35 areas of study.

Princeton has an undergraduate enrollment of 3,520 and a graduate student body of approximately 1,436. All are full-time students. Beginning in September, 1969 the University will admit over 150 women undergraduates. By 1973-74 Princeton projects an undergraduate enrollment of 3,900 (3,250 men and 650 women).

RUTGERS UNIVERSITY

Rutgers University, the State University of New Jersey had its origin as Queen's College, chartered by George III of Great Britain in 1766, the eighth college to be founded in the American Colonies. In 1864, Rutgers became the State's land-grant college under the Morrill Act. At that time, the Trustees organized a course of study leading to the Bachelor of Science degree and in 1901 a program leading to the Bachelor of Letters. In 1945, Rutgers University was designated by the Legislature as The State University of New Jersey. Rutgers is accredited by the Middle States Association.

The State University is composed of 18 major instructional divisions, and has campuses in New Brunswick, Newark, and Camden, as well as classroom units in two other cities. The College of Agriculture was organized in 1914 in New Brunswick and renamed the College of Agriculture and Environmental Sciences in 1965. This college includes the New Jersey Agricultural Experiment Station (established 1880) and the Co-operative Extension Service (established 1913). The College of Engineering was made a separate division in 1914; Douglass College was established in New Brunswick in 1918. The most recent addition to the New Brunswick campus is Livingston College, organized in 1968 as a liberal arts college specializing in urban problems.

Rutgers' activities in Newark began in 1927 when the New Jersey College of Pharmacy joined the University. In 1946 the University of Newark was incorporated into the State University, thereby adding the School of Law, School of Business, and Dana College (now the College of Arts and Sciences) to the Rutgers complex. The College of Nursing was established at Newark in 1956.

The College of South Jersey, then consisting of a two-year college and a law school located in downtown Camden, was incorporated into the University in 1950. The two-year liberal arts college has since been expanded to a full four-year college program and the School of Law now offers a program leading to the Juris Doctor degree.

Graduate studies are offered in New Brunswick at the Graduate School of Education, organized in 1923, the Graduate School of Social Work (1954), the Rutgers Medical School (1961), and the Graduate School (1952) which supervises all Ph.D. programs and provides offerings in some 70 areas of liberal arts and sciences. The School of Law, College of Nursing, Graduate School of Business Administration, College of Pharmacy, and the Graduate School offer graduate programs in Newark.

The Graduate School offers programs in the humanities and sciences leading to the following degrees: M.A., M.S., M.F.A., M. City Planning, M.A.T., M.S.T., M. Phil., and Ph.D. Other graduate degrees offered by the various colleges and divisions are Master of Social Work, Master of Library Service, Doctor of Library Science, Juris Doctor, Master of Education, Specialist in Education, Doctor of Education, and Master of Business Administration. All of the colleges are co-educational with the exception of Rutgers College, which presently admits only men, and Douglass College which admits only women.

Another division of the State University is University College which offers a broad program of undergraduate credit work for part-time students in the evening in Camden, Jersey City, Newark, New Brunswick, and Paterson.

Curricula lead to the B.S. and B.A. degrees in New Brunswick, Newark and Camden; to an associate degree in business in all five divisions; to an associate degree in public administration in Newark and New Brunswick; to an associate degree in police science in Newark and New Brunswick; and to an associate degree in mathematics and physical science in Camden. Credit may be transferred to other divisions of the University.

All other undergraduate colleges of the University offer programs leading to the Bachelor of Arts and Bachelor of Science degrees in numerous fields. Course work is offered in the summer in addition to the regular academic year in New Brunswick, Newark, and Camden.

The University Extension Division provides educational programs at the college level for persons who are not regularly enrolled students in the University. Often in cooperation with other divisions of the State University, it sponsors courses and conferences in adult education, and community services. It provides programs of instruction for government, industry, labor, professional groups, and individuals, in activities conducted both on and off campus. Within the Extension Division is the Institute of Management and Labor Relations established in 1947.

Other specialized divisions of the State University include the Eagleton Institute of Politics (1956), the Institute of Microbiology, the Center of Alcohol Studies, the Urban Studies Center (1959) the Center for Computer and Information Services, and the University Library. For on-campus research which cannot be conducted in departmental facilities, laboratories, or the library, the University has provided a number of cooperative centers. Each of these bureaus, centers, and museums offers facilities for study and research to faculty and students in all branches of the University.

Rutgers University now enrolls over 29,000 students of which three-fourths are undergraduates. Approximately two-thirds of the undergraduates and one-half of the graduates are enrolled as full-time students.

ST. MICHAEL'S PASSIONIST MONASTERY

St. Michael's Monastery was founded in 1861 in "Kerrigans Woods" which is now a site in Union City, New Jersey. The Seminary Department of the Monastery is a unit in an educational system which includes Passionist seminaries in New York, Massachusetts, Pennsylvania and Ontario, Canada. The Seminary Department, as an institution of higher learning, educates candidates for the priesthood in the Passionist Congregation. The Passionist Congregation is a community of Priests, Students and Brothers.

The curriculum of the Seminary Department is based upon the prescriptions of the Holy See, and the statutes of the Passionist Congregation. Training given is broad enough to fit students for assignment in most fields of the apostolate, while at the same time providing for the needs of those who will engage in further studies after ordination.

Admission is restricted to those who are members of the Passionist Congregation and intend to become priests in the same Congregation. Each applicant must have a Bachelor's degree from an approved college. Completion of the program qualifies the student for the Master of Arts degree.

SETON HALL UNIVERSITY

Seton Hall University is a Roman Catholic institution in South Orange, New Jersey, under the auspices of the Archdiocese of Newark. It was founded as Seton Hall College at Madison, New Jersey in 1856 and moved to the present site in 1861. In addition the University maintains an undergraduate division in Paterson established in 1954 and the School of Law in Newark established in 1951. A variety of graduate and undergraduate programs is offered on the South Orange campus by the College of Arts and Sciences, the School of Business Administration, the School of Education, and the School of Nursing. The Divinity School is an individual scholastic unit within the framework of the College of Arts and Sciences. The School supervises the academic progress of its students during the initial four years of College spent on the South Orange Campus before entrance into the Major Philosophical-Theological Seminary of the Immaculate Conception, Darlington, New Jersey. Seton Hall University is a member of the Middle States Association.

Men are admitted as resident and day students to the undergraduate programs offered on the South Orange Campus. Women are admitted to day classes in Elementary Education and Nursing, and all undergraduate programs with the exception of the Divinity School. Both men and women are admitted to the Paterson division of the University for day and evening courses, and to the graduate and evening courses on the South Orange Campus.

Seton Hall University offers courses leading to the A.B., B.S. and B.S.N. degree at both the South Orange and Paterson campus. Seton Hall University does not conduct a separate graduate school. Graduate programs leading to the M.A., M.S. and M.B.A. degrees are given in several departments and a program leading to the Ph.D. is offered in chemistry.

The enrollment of the University now slightly exceeds 9,000. In 1969 Seton Hall enrolled 9,066 students of which 684 were full-time graduates and 4,574 full-time undergraduates. Approximately 2,800 are registered as part-time students all in graduate divisions.

Seton Hall University has established an Institute of Far Eastern Studies (1951) and an Institute of Judeo-Christian Studies (1953) to supplement continuing research and to offer Special Training programs. The University Museum established in 1960, the Art Gallery established in 1963, and the Computer Center have broadened the extra-curricular resource base available to students and faculty at Seton Hall.

No extension work is undertaken by the University beyond the usual offerings of the evening division at the Paterson Campus.

STEVENS INSTITUTE OF TECHNOLOGY

Stevens Institute of Technology, a privately supported, non-sectarian engineering and science college, was founded at Castle Point, Hoboken, New Jersey, in 1870. Stevens is a member of the Middle States Association.

On the undergraduate level, there is a non-specialized engineering curriculum leading to the degree of Bachelor of Engineering and a unified science program for students interested in chemistry, mathematics and physics leading to the degree of Bachelor of Science.

On the graduate level, the Institute offers the Master of Science degree in chemistry, computer science, mathematics, metallurgy and physics; the Master of Management Science degree; the Master of Engineering degree in the fields of chemical, electrical, mechanical and ocean engineering, and the Doctor of Philosophy degree in the fields of chemical, electrical, mechanical and ocean engineering, chemistry, management science, mathematics, metallurgy and physics.

The enrollment at Stevens is 2,725 and is about equally divided between the undergraduate and graduate levels. An undergraduate and two graduate summer sessions are offered in addition to special summer sessions for high school science teachers, and high ability high school mathematics students.

Special laboratories and other facilities supplement the research and activities of the academic departmental laboratories. These special facilities include: the Davidson Laboratory with its emphasis on hydro and terradynamic research; the Cryogenics Center for research in the physics of low temperatures; the Laboratory of Psychological Studies; and the Computer Center.

THE INSTITUTE FOR ADVANCED STUDY

The Institute for Advanced Study, founded in 1930, is located in Princeton, New Jersey. The Institute partakes of the character both of a university and of a research institute; but it also differs in significant ways from both. It is smaller than a university and its academic membership at any one time numbers only a little over a hundred. The Institute has no formal curriculum, no scheduled courses of instruction, no commitment that all branches of learning be represented in its Faculty and members. Its purposes are broader than a research institute as it supports many separate fields of study, maintains no laboratories, and welcomes temporary members, whose intellectual development and growth are one of its principal purposes.

The Institute presently consists of three schools: a School of Mathematics, a School of Natural Sciences, and a School of Historical Studies.

For the three year period beginning with the academic year 1968-1969, the Institute began a three-year experimental program in the social sciences. This will involve bringing together for each of the three years six to eight scholars who are using the methods and perspectives of the social sciences in the study of history, especially the study of social change. The visitors under this program will be drawn from a variety of disciplines.

The Institute for Advanced Study and Princeton University are organically and administratively distinct, the faculties and students of the two institutions cooperate in advanced work in a number of fields. Members of the two institutions participate in joint seminars and informal discussions and some members of the Institute's Faculty lecture in the University.